AUDITOR GENERAL
Alberta

Report of the Auditor General of Alberta

October 2009

Mr. Leonard Mitzel, MLA
Chair
Standing Committee on Legislative Offices

I am honoured to send my *Report of the Auditor General of Alberta—October 2009* to the members of the Legislative Assembly, as required by section 19(5) of the *Auditor General Act*.

This report together with my *April 2009 Report* provides timely reporting to the Legislative Assembly on the results of the work of the Office of the Auditor General.

Fred J. Dunn, FCA
Auditor General

Edmonton, Alberta
September 25, 2009

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Report of the Auditor General of Alberta—October 2009

Message from the Auditor General

What we do and why it's important

After almost eight years as the Auditor General of Alberta, I will be retiring on February 15, 2010. As this will be my last public report, I wanted to take this opportunity to say that it has been an honour and privilege to serve the members of the Legislative Assembly, and through them, the people of Alberta.

Our Office's role

As an independent Officer of the Legislature, my role has been to assist the Legislative Assembly, and in particular the Public Accounts Committee, in holding the government accountable. Our Office provides opinions on whether the consolidated financial statements of the province, and the financial statements of every ministry, department, fund and provincial agency, are presented fairly, clearly and completely. Our financial statement audits often lead to recommendations to improve the financial reports, and the processes that produce them. Another key part of our mandate is to examine and report on the government's accounting and management control systems. Through our systems audit work, we identify opportunities and propose solutions to improve the use of public resources. We report our findings and recommendations to the Legislative Assembly through our semi-annual public reports.

While many of the issues that our Office has dealt with over the years are challenging, sensitive, and sometimes contentious, I'm pleased that our work has contributed to positive changes around important issues that impact the lives of Albertans.

Report Highlights

I have tried to focus our priorities and resources in areas that result in improved:
* governance and ethical behaviour—these underpin the success of any organization
* safety and welfare of all Albertans—especially the most vulnerable in our society
* security and use of the province's resources—which belong to all Albertans and must be protected for future generations

Good governance

Transparency and informed decision-making are key elements of good governance. In this report, we have made several recommendations that highlight the need for improved governance. In particular, our recommendations relating to executive compensation[1] and termination payments[2] all demonstrate how important it is to have well-understood, consistently applied, and transparent

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[1] Recommendation No. 1—page 22, Recommendation No. 18—page 144
[2] Recommendation No. 27—page 254

practices. Otherwise, it is difficult for the government to hold boards accountable for how they spend public funds.

Improved safety and welfare

Our recommendations relating to food safety[3] and commercial vehicle safety[4] demonstrate the importance of having effective systems for monitoring and enforcing compliance with regulatory requirements. If compliance is not consistently and effectively monitored and enforced, behaviours won't change, and public health and safety will not be improved.

Efficient use of public resources

In this report, we have also identified cases where costs are not clearly understood, explained, or transparent[5]. Effective cost planning ensures that Albertans are receiving value for money, and public resources are being managed responsibly. Without being able to fully understand or explain the costs of a government program or activity, it's difficult to assess whether the results are justified, or be able to assess if steps to control and reduce costs are working. This is particularly important for the Legislative Assembly since they consider and approve budgets. The public also has a right to know how the government is managing its resources, and what its strategies are for determining and controlling costs.

Acknowledgement and thanks

In closing, I want to express my gratitude to the following and thank them for all of the advice, suggestions, and support they have given through the years:

- Members of the Legislative Assembly, in particular members of the Standing Committee on Public Accounts who, through their questions and suggestions, identify audits that would help them do their work as legislators.

- Members of the public, who contact us with concerns about government systems. They help us to plan the focus of our future audit work.

- Members of the Provincial Audit Committee, who provide wise counsel. This group of senior business executives with financial, business and governance skills has an important advisory role to government and our Office.

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[3] Food Safety—Follow-up—page 87
[4] Commercial Vehicle Safety—page 115
[5] Recommendation No. 5—page 51, Recommendation No. 6—page 73

- The organizations that we audit, whose cooperation is fundamental to our success. Senior management and board members of audited organizations meet with us to discuss our audit plans, findings, and recommendations. They give us the necessary information, reports, and explanations to our questions.

- Various advisors, who contribute their expertise to help us complete our major systems audits.

Finally, I want to say that I have been very fortunate over these years to work with an Office full of talented individuals, whose dedication and commitment to improving the public sector, has resulted in lasting benefits to all Albertans. Although my time with the Office is coming to a close, I know that my staff will continue to make a difference by identifying opportunities to improve government programs and initiatives that affect peoples' lives, and ensuring that Albertans are getting good value for their money.

Fred J. Dunn, FCA
Auditor General

September 25, 2009

Recommendation Highlights

This report contains 75 recommendations, all listed, starting at page 7. We have numbered 35 recommendations that need a formal response from the government. Of the 35 numbered recommendations, 27 are new, and the other 8 repeat previous recommendations where implementation progress was too slow. By repeating these recommendations, we expect the government to formally recommit to their implementation.

Prioritizing our recommendations

As part of the audit process, we provide recommendations to government in documents called management letters. We use our public reporting to bring our recommendations to the attention of Members of the Legislative Assembly (MLAs). For example, members of the all-party Standing Committee on Public Accounts refer to the recommendations in our public reports during their meetings with representatives of government ministries and agencies.

To help MLAs, we prioritize recommendations in our public reports to indicate where we believe they should focus their attention. We categorize them as follows:

- **Key recommendations**—these are the numbered recommendations we believe are the most significant.
- **Numbered recommendations**—these recommendations require a formal response from the government. By implementing these recommendations, the government will significantly improve the safety and welfare of Albertans, the security and use of the province's resources, or the governance and ethics with which government operations are managed.
- **Unnumbered recommendations**—these recommendations, although important, do not require a formal response from government.

Reporting the status of recommendations

We follow up all recommendations and report their status in our public reports. The timing of our follow-up audits depends on the nature of our recommendations. To encourage timely implementation, and assist with the timing of our follow-up audits, we require a reasonable implementation timeline on all recommendations accepted by the government or the entities we audit. We recognize some recommendations will take longer to fully implement than others but we encourage full implementation within three years. Typically, we do not report on the progress of an outstanding recommendation until management has had sufficient time to implement the recommendation and we have completed our follow-up audit work.

The status of our recommendations is reported as follows:

- Implemented—we briefly explain how the government implemented the recommendation.
- Repeated—we explain why we are repeating the recommendation and what the government must still do to implement the recommendation.
- Progress report—we provide information when we consider it useful for MLAs to understand management's actions.
- Satisfactory progress report—we may want to state that progress is satisfactory based on the results of a follow-up audit.
- Changed circumstances—if the recommendation is no longer valid, we briefly explain why.

Outstanding recommendations

We have a chapter called Past Recommendations—see page 335. It provides a complete list of the recommendations that are not yet implemented. Although management may consider some of these recommendations implemented, we do not remove recommendations from the list until we have been able to complete follow-up audit work to confirm implementation.

October 2009 Recommendations

⚷ —Indicates a key recommendation

Green print—numbered recommendations

Black print—unnumbered recommendations

Systems Audits

Public Agencies—Executive Compensation

Alberta's Response to Climate Change—Part 2

Commercial Vehicle Safety

Financial Statement and Other Assurance Audits

Government of Alberta and Ministry Annual Reports

Advanced Education and Technology

Energy

Environment

Finance and Enterprise

Sustainable Resource Development

Transportation

Systems audits

Report of the Auditor General of Alberta—

Public Agencies—Executive Compensation

1. Summary

What we did

Examples illustrate need for improvement

We brought together examples of executive compensation practices in Alberta's public agencies[1] to illustrate areas where public agencies can improve their practices and transparency. We identified the examples through our 2008 and 2009 audits of public agencies, and this work consolidates the examples into one place. These areas of improvement expand on those matters identified in our 2008 audit of Chief Executive Officer selection, evaluation and compensation.

Boards of directors have expressed to us that government-wide guidance on executive compensation practices would be useful. We believe public agencies can learn from the experiences of others.

What we found

Public agencies do not always meet good practices

We found that Alberta public agencies do not follow consistent executive compensation practices and do not always meet good practices. Public agencies should follow prudent practices based on established principles that are generally accepted, well understood and transparent. In the absence of clear guidance from government, public agencies will continue to develop their own executive compensation practices.

Termination benefits are not consistently disclosed

Alberta public agencies do not consistently disclose termination benefits paid to senior executives.

What needs to be done

Government guidance would help boards

The government needs to provide public agency boards of directors with adequate and appropriate guidance on executive compensation governance. The government needs to assess how Alberta's public agencies would benefit from the private sector's approach to executive compensation governance and disclosure. While not all private sector practices apply to the public sector, many of the principles, if adopted, would improve the governance and transparency of executive compensation in public agencies.

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[1] For the purposes of this report, public agencies are as defined in the *Alberta Public Agencies Governance Act* (Bill 32), which received Royal Assent on June 4, 2009, but has not yet been proclaimed in force.

Guidance that is acted on will improve systems	Clear guidance from the government to public agencies on executive compensation practices will help:

- establish generally accepted and well-understood executive compensation practices that improve the transparency of Alberta public agencies
- increase efficiency as public agency boards of directors use this guidance to develop a deeper understanding of current compensation practices and evaluate and improve their current practices

Disclosure needed	Public agencies need to consistently disclose termination benefits paid.

Why this is important to Albertans

Transparency makes boards more accountable	Value for money, in the context of public agencies' executive compensation, means executives should be compensated for their performance and achievement of public agency and government objectives. Without well-understood, consistently applied and transparent executive compensation systems, it is more difficult for Albertans to hold public agency boards of directors accountable for their decisions.

A well-designed executive compensation process will ensure that:

- boards of directors understand what they are trying to achieve through the compensation plan
- boards of directors understand the value of the entire compensation package—Compensation programs generally have many components (salary, short- and long-term performance pay, post-retirement benefits, and more) that boards need to consider together when evaluating the appropriateness of the compensation package
- Albertans understand how the public sector compensates executives

Absence of limits makes transparency more important	The absence of boundaries or limits on compensation for public agency executives makes it more important that public agencies follow a well-defined and transparent executive compensation system.

2. Scope of our work

We are not providing an opinion on the appropriateness or fairness of Alberta public agencies' executive compensation decisions. In this work, we examined the underlying executive compensation and disclosure practices of the boards of directors that govern public agencies.

Designing an executive compensation package is complex and Alberta public agencies follow various systems to reach their decisions. However, public agencies' boards of directors can use our observations and conclusions to improve their executive compensation systems.

Our objective was to identify areas where improvements can be made. We have not evaluated all public agencies' executive compensation systems and packages. Therefore, we have only named public agencies in this report when we have already identified the agency by name elsewhere in our public reports.

3. Background

Compensation used to attract, retain and motivate

Alberta public agencies use compensation packages as a means to attract, retain and motivate public agency executives. For Albertans to ensure they are getting value for money, compensation should result from a well-designed process to pay executives fairly for the performance expected and delivered.

Boards govern public agencies

In a public agency corporate governance model, public agencies receive their authority through legislation and operate at arm's length from the government. The government appoints a board of directors to govern the organization. The board oversees management, sets strategic direction and monitors performance. The board also establishes its own compensation programs and policies. Boards are accountable to ministers. This governance model attempts to balance a public agency's autonomy and the government's accountability.

Boards are not required to follow public service practices

Most board-governed Alberta public agencies have more freedom than Alberta government departments to determine how they compensate executives. Public agency boards are generally not required to follow the *Public Service Act*[2] or public service policies.

Government guidance must respect board autonomy

The government has a role to play in providing guidance to public agencies on executive compensation practices. This guidance needs to balance a public agency board's autonomy with appropriate government oversight. Public agencies must also balance the need to attract and retain executive talent with the cost to the public sector.

Components of compensation

Public agency executive compensation packages include salary, performance pay, post-retirement benefits, and other benefits such as disability insurance, life insurance, health and dental plans, and termination benefits. Certain public agencies provide vehicles, perquisites (such as membership fees, car allowances, and others) and low interest loans.

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[2] R.S.A. 2000, c.P-40

Not all compensation systems are the same

Public agency executive compensation systems are not all the same. Systems vary depending on the type of public agency and the level of the executive. For example, boards of directors can establish chief executive officer (CEO) compensation through three different models, depending upon the public agency:

- Compensation arrangements and employment contracts are negotiated between the CEO and the public agencies' board.
- The salaries of the CEO and senior officials are established by Order-in-Council, but the board and the CEO negotiate the remainder of the compensation plan.
- Government departments establish compensation for public agency executives who are essentially department employees. These employees typically follow a government salary grid and public service pension and benefit plans.

For the compensation of other executives, public agency boards of directors have administrative responsibility for establishing the compensation arrangement. These boards may delegate their authority to a compensation or human resource committee or to the organization's CEO.

4. Recommendations

In our *October 2008 Report* (No. 1—page 27), we recommended that the Deputy Minister of Executive Council through the Agency Governance Secretariat assist agencies and departments by providing guidance in the areas of CEO selection, evaluation and compensation.

The government accepted our recommendation in principle. It asked the Secretariat to collaborate with Treasury Board and Corporate Human Resources to provide consistent information and guidance on good practices in these areas. The government's work plan to implement this recommendation is to be completed by the end of the 2009–2010 fiscal year.

In our opinion, the government's guidance for public agency boards of directors on compensation practices should focus on all public agency executives—not just CEOs. Therefore, our new recommendation to the Deputy Minister of Executive Council broadens our 2008 recommendation to include all senior executives in public agency senior decision making group.

4.1 Executive compensation practices

Recommendation No. 1

We recommend that the Deputy Minister of Executive Council, through the Agency Governance Secretariat, assist public agencies and departments by providing guidance on executive compensation practices for all public agency senior executives.

Background

Role of the Secretariat

The government established the Agency Governance Secretariat to help public agencies implement the Public Agencies Governance Framework and provide them with support on governance-related matters. The government developed the Framework in response to recommendations from a task force that in 2007 reviewed the governance of Alberta public agencies. We support the Secretariat in its role of helping public agencies improve governance practices, including executive compensation governance practices.

Criteria: the standards we used for our audit

The government should provide public agencies with adequate and appropriate guidance on executive compensation practices.

Observations on public agency executive compensation practices

Guidance has not been provided

The government has not formally provided public agencies with guidance on executive compensation practices. In our opinion, public agency boards of directors would benefit from the government's guidance.

Areas where improvements can be made

We identified the following areas where executive compensation practices can be improved:

- executive compensation systems and board compensation committees
- termination benefits—these are amounts due to an executive when they stop working for the public agency
- supplementary retirement plans
- performance pay (variable pay, bonuses, or pay-at-risk)
- board oversight of executive compensation arrangements

Current practices

We identify in an Appendix, (see page 31) current practices to help boards of directors evaluate their current practices and determine if improvements are necessary.

Executive compensation systems and board compensation committees

Boards need clear policies and compensation processes

Our *October 2008 Report* recommends a number of compensation practices for public agency boards of directors. The areas identified where improvements can be made were:

- use of formal compensation policies

- use of peer group comparisons to establish target compensation
- ensuring the peer comparator group is sufficiently broad and of sufficient size
- use of external advisors and assessment if conflicts of interest exist
- variable pay (performance pay)
- severance provisions (termination benefits)
- supplementary retirement plans

While the issues identified in 2008 relate to CEO compensation, we believe our observations apply to all public agency senior executive compensation arrangements that are the result of similar systems.

Termination benefits

Public agencies' termination costs are typically higher than the public service's costs

Termination benefits at Alberta public agencies are not consistent among public agencies or with the government's practices for public service employees. The Government of Alberta's Treasury Board provides direction for the termination and release of deputy ministers and senior officials.[3] Public agencies are not required to follow this directive, other than for some identified senior officials. Instead, each public agency develops its own termination policies and practices. This typically results in higher termination benefits than would have been paid if the public agencies had followed Treasury Board's directive.

Specifically, public agencies' termination practices included:
- notice periods ranging from 18 to 33 months for health sector CEOs and from six to 24 months for other health sector executives
- paying outplacement and legal costs for some terminated executives
- paying performance bonuses for periods after the executive had been terminated
- paying supplementary retirement plan (SRP)[4] benefits during the notice period, at costs ranging from $20,000 to $300,000
- paying replacement costs of life insurance, medical and dental coverage for a terminated executive
- allowing continued earning of pensionable years of service for an executive who had been terminated
- not having clearly defined termination benefits in employment contracts

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[3] Treasury Board Directive 01-96 – *Termination and Release of Deputy Ministers and Other Senior Officials* – The Deputy Head of Executive Council may approve severance up to the equivalent of 52 weeks of salary plus an additional amount in lieu of benefits for senior officials and deputy heads. The directive goes on to state that if this individual becomes employed or is retained by fee-for-service contract during the severance period by a department or agency the individual will reimburse a pro-rated portion of their termination pay to the employer.

[4] SRPs are designed to provide retirement benefits similar to those offered under registered pension plans, but without the same contribution limits. Employers use them to increase the retirement compensation of higher income executives and employees.

Release agreement provisions were not consistent

Release agreements signed by the terminated executives were also inconsistent. Some agreements included non-compete arrangements while others used different provisions or had them removed. Provisions similar to the Treasury Board Directive that would prevent "double dipping"[5] by terminated executives were not included in all release agreements. These provisions require an executive to reimburse termination benefits for the time their new employment overlaps with the severance period.

Deferred salary is not disclosed

In our *October 2008 Report*, we also identified employment contracts that entitled executives to payments upon voluntary termination (resignation or retirement). This is deferred salary rather than severance. These entitlements, their existence and amounts, were not publicly disclosed.

B.C. government has dealt with the issue

The British Columbia public sector dealt with termination standards through its *Public Sector Employers Act*[6]. Its termination standards apply to government and public agency employees and bring consistency to British Columbia's termination benefits to senior public sector employees. In Alberta, there is no similar standard for public agencies.

Supplementary Retirement Plans

Guidance on the use of SRPs not provided

The government has not provided adequate and appropriate guidance to public agencies on their use of supplementary retirement plans. We continue to see public agencies entering into various plan designs and unique post-retirement arrangements. The government has a role to play in providing guidance on SRPs because, in most cases, it ultimately funds these future obligations.

In 2008, SRP obligations were over $47 million

Public agencies' obligations for SRPs at the end of 2005–2006 were $36.3 million; their assets for these plans were only $4.9 million. Public agencies' obligations for SRPs grew to $47.9 million by the end of 2007–2008, at which time their assets were only $7.5 million.[7]

Various terms and benefits provided

Our 2008–2009 review of public agency SRPs identified various terms and plan designs. Each term and plan design has an associated public cost. Specifically, we identified the following costs:

- contributions—Most plans did not require employee contributions, which means the taxpayer pays the full cost. In contrast, the government's public service SRP requires substantial employee contributions.

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[5] Double dipping is a term used to describe an executive who receives severance for a notice period, but during that period gains employment in or accepts a fee-for-services contract with the public sector.
[6] [RSBC 1996] Chapter 384
[7] Since 2005–2006, public agencies may have created other SRPs, but we exclude the impact of these plans from the numbers above to allow for comparability between 2005–2006 and 2007–2008. These numbers also exclude SRPs in school boards.

- pensionable earnings—Some public agencies' SRPs included the full amount of performance bonuses as pensionable earnings; others included performance bonuses of up to 20% of base salary as pensionable earnings. In contrast, the public service SRP does not consider lump sum payments such as performance pay to be pensionable earnings. There is a significant cost associated with including one-time performance bonuses in pensionable earnings.

Some executives received benefits for years of service they did not provide to that employer

- crediting prior years of service—Public agencies credited senior officials with years of pensionable service for years they did not work for the organization. In the health sector, for example, one board credited its CEO with 28.6 years of service even though the CEO had only worked at the region for 8.8 years. There are other examples where boards credited former health and university executives with additional years of service for years they did not work for the organizations.

- retirement benefits—Some plans were based on 1.75% per year of the highest five consecutive years of earnings, while others were based on 2% per year. One arrangement provided for retirement benefits to be paid at 5% per year of the executive's annual salary.

- unreduced retirement date—The earliest unreduced retirement date on SRPs varied. We saw plans using 60 years of age, 65 years, the earlier of 60 years or 85 points, and the earlier of 65 years or 85 points. The 85 points are reached when someone's age and pensionable years of service add up to 85.

- indexing—Indexing links pension payments with the Alberta consumer price index (CPI). Some plans had indexing at 60% of changes in Alberta CPI. Others had ad hoc indexing or no indexing at all.

- benefit payment periods—Benefit payment periods varied among SRPs. Most plans paid benefits for the executive's lifetime. Others were restricted to fixed periods of time (for example, 10 years).

- earning years of service after termination—In one termination agreement, Alberta Health Services agreed that a CEO would be eligible for two additional years of pensionable service after termination.

In our *2005–2006 Annual Report* (vol. 2—page 97), we recommended that the Department of Finance assess the annual and cumulative costs and risks associated with SRPs. See page 219 for our follow-up audit of this recommendation.

Performance pay (bonuses)

Some boards
established
performance
measures; others
did not

In our *October 2008 Report*, we stated that the use of performance pay (also called variable pay, bonuses, or pay-at-risk) for CEOs of public agencies varied significantly. Certain public agency boards of directors used established performance measures as the basis for performance pay. Others did not use objective criteria, resulting in amounts that were either automatic or arbitrary.

Well-designed public agency performance pay programs:
- align organizational goals with employee performance
- recognize measurable change
- align pay with the achievement of results
- help organizations attract, retain and motivate key individuals

ATB Board
judgment

In our *October 2008 Report* (page 126), we reported that the Board of ATB Financial approved executive performance pay for 2007–2008, despite its policy that it would not pay a performance bonus if ATB's net income was below 50% of the budgeted target. We reported that in the Board's judgment this was the right decision.

In our opinion, if organizations need to change the performance targets after the start of the performance period, it generally indicates that there was a flaw in the original design of the performance pay program.

Not applying
vesting periods
reduces
effectiveness of
long-term
compensation

We saw long-term incentive plans being used by a few Alberta public agencies. In these long-term incentive plans, the board awards annual grants to eligible executives. The plans have a vesting period during which the grant will not be paid to the executive. During the vesting period, the grant's original value will increase or decrease over a set period (usually three or four years) based on performance criteria. We observed that one organization ignored the vesting period restriction when executives left. This reduces the effectiveness of a long-term compensation plan, because it does not consider the plan's long-term time horizon or the results of strategic decisions made by those executives.

In 2008–2009, the CEO of the Capital Health Region approved retention bonuses of $20,000[8] each to 15 executives. Their documentation stated that if the executives left the organization before March 31, 2009, the retention bonuses would be recovered on a pro-rata basis. Eight executives were terminated before March 31, 2009, and these amounts were not recovered on termination. Capital Health's Human Resource Department advised us that the retention payment would have only been recovered if the employee had voluntarily quit. But this was not clear in the documentation.

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[8] See page 259 of this report.

Terminated executives received performance pay

We saw examples of boards awarding performance pay to terminated executives, including the following:

- terminated executives received performance pay for a period of time in 2008–2009 before termination, but it was not clearly documented what results they achieved during this period
- an executive received a performance payment for the three-month period after the termination date
- executive severance payments were paid to four individuals that included performance payments for notice periods that ranged from 9 to 18 months

Board oversight of executive compensation arrangements

U of C's board lacks clear processes for negotiating CEO compensation

On page 146, we recommend that the University of Calgary's Board of Governors establish systems and processes to guide all aspects of compensation, including the timely negotiation and completion of pension and employment contract arrangements for senior executive positions.

As part of that audit we found:

Compensation policy not formalized

- The University's compensation committee had no formal compensation policy to guide the Board's contract negotiations with executives
- The University did not have a well-defined process to:

Financial impacts not assessed

  - assess the financial impact and related obligation to the University for terms negotiated in executive employment contracts
  - communicate key information to the University Administration and ensure contracts are completed in a timely manner

On page 256, we report that Alberta Health Services lacked severance policies and board- and management-oversight of the executive severance process. Severance policies and a clearly defined process that included roles and responsibilities for negotiating, reviewing, approving and paying severances did not exist.

Implication and risks if recommendation not implemented

If compensation practices are not well designed, public agencies' boards of directors may:

- be unable to recruit and retain talented executives
- be unable to motivate executives to achieve the results expected of them
- pay for performance that does not meet established expectations
- approve benefits without understanding the full cost of those benefits

4.2 Disclosure of termination benefits paid

Recommendation No. 2

We recommend that the Ministry of Treasury Board increase transparency of termination benefits by adopting disclosure practices for Alberta public agencies that disclose termination benefits paid.

Background

The current Treasury Board *Salary and Benefits Disclosure Directive*[9] requires all departments, regulated funds, provincial agencies and Crown-controlled organizations to include salary and benefit information in their financial statements. Our *October 2008 Report* recommendation (No. 3—page 32) focused on applying the private sector's requirements for compensation disclosure to the Alberta public sector. The Ministry of Treasury Board has this recommendation under review. Our current recommendation focuses on termination benefits, which are one piece of compensation disclosure.

Criteria: the standards we used for our audit

There should be transparent and full disclosure of executive compensation throughout Alberta public agencies.

Our audit findings

Public agencies do not consistently disclose termination benefits

Alberta public agencies do not consistently publicly disclose executive termination benefits. The current Treasury Board *Salary and Benefits Disclosure Directive* requires disclosure of salary, lump sum payments, performance pay, payouts of accumulated vacation and benefits, but not of termination benefit payments.

Transparency needed to help Albertans hold public agencies accountable

We observed examples at public agencies of termination benefit payments ranging from $195,000 to $825,000 that were not publicly disclosed. These examples are not a complete list of all public agencies' executive termination payments. However, they provide context for the significant cost of termination benefits. The payments we observed were in accordance with employment contracts. Our concern is that termination benefits are not transparent. In our opinion, Albertans' ability to hold organizations accountable for their decisions is reduced when termination benefits are not clearly disclosed.

Some good examples do exist

We also found good examples of organizations that disclosed termination benefit payments:
- In the health sector, the *Regional Health Authorities (Ministerial) Regulation*[10] section 9 and the *Financial Directive 34* (Requirements for

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[9] Directive #12 ~ 98
[10] Alta. Reg. 17/95

Financial Statements and Supplementary Schedules) required health regions and boards to disclose direct or indirect termination benefit payments to individuals by including these payments in the salary and benefit schedule.

- The March 31, 2009 financial statements of one public agency, disclosed that a former executive would receive a retirement allowance of approximately $1.2 million and an employment agreement payout of $960,000.

Disclosure requirements in the private sector are greater than in public agencies

Good compensation disclosure practices in the private-sector are published by the Institute of Corporate Directors (ICD)[11] and the Canadian Coalition for Good Governance.[12] Both organizations advocate the full disclosure of compensation arrangements, including termination benefits. The Canadian Securities Administrators require publicly listed entities in Canada to disclose termination benefits.[13] Although Alberta's public agencies are not subject to these disclosure requirements, in our opinion, adopting these principles would strengthen transparency of and accountability for termination benefits.

B.C. termination benefits are disclosed

In the public sector, British Columbia's executive compensation disclosure practices follow its *Public Sector Executive Compensation Reporting Guidelines* (June 1, 2008), which require a Statement of Executive Compensation. This statement includes termination benefits.

Executive contracts typically include these benefits

In our audit of CEO selection, evaluation and compensation, we identified that termination benefits were generally included in most Alberta public agencies' contracts with CEOs. We have not examined all public agencies' executive contracts, but would expect to find that most include termination provisions.

Implication and risks if recommendation not implemented

Alberta public agencies will not be transparent and fully accountable to Albertans if they do not consistently disclose termination benefits paid.

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[11] ICD Blue Ribbon Commission on the Governance of Executive Compensation in Canada (June 2007)
[12] Good Governance Guidelines for Principled Executive Compensation working paper (June 2006)
[13] National Instrument form 51-102F6 Statement of Executive Compensation

Current Practices for Boards of Directors— Appendix

To help public agency boards of directors, we have identified a number of current practices based on our observations. These are consistent with good executive compensation practices suggested by the Institute of Corporate Directors and the Canadian Coalition for Good Governance.

These current practices are not presented as recommendations since the Office of the Auditor General does not expect a formal response to them from government. However, public agencies should decide if their compensation systems for senior executives could be improved by examining:

- their existing executive compensation practices
- the current practices below
- the recommended practices on CEO compensation reported in our *October 2008 Report* (pages 41 to 48)

Boards of directors should:

- ensure compensation policies exist and are followed—procedures should also exist that assign roles and responsibilities for determining senior executive compensation, and identify critical factors to consider and information required
- ensure executive compensation plans exist and include all elements of compensation—these plans should be approved, documented and regularly reviewed
- understand the full financial impact and cost to the organization of the entire compensation arrangement
- develop executive termination guidelines that are reasonable and consistent their guidelines should reflect common law standards
- understand the total cost of supplemental retirement plans—any unique elements of a plan's design needs to be carefully assessed and the full cost of these elements understood
- ensure performance pay plans (if used):
  - identify and articulate the purpose of the plan
  - include an objective and measurable methodology for setting performance targets and payout amounts
  - contain targets that are challenging and represent real, measurable change
  - are paid only when executives have met performance criteria—boards should base performance pay on results and stick with their methodologies whether the results are positive or negative

Recruiting, Evaluating and Training Boards of Directors—Follow-up

Background

In our *2004–2005 Annual Report of the Auditor General of Alberta*, we recommended that:

- the Deputy Minister of Executive Council update Alberta public sector principles and guidance so that they are consistent with current good practices for recruiting, evaluating and training directors. (No. 1—page 28)
- the guidance includes a statement that governing boards evaluate and report publicly their own performance against both Alberta public sector principles and their own board governance policies. (No. 2—page 28)

Our audit findings

Alberta public sector principles and guidance—implemented

Framework
adopted

This recommendation has been implemented through the Government of Alberta's adoption of the *Public Agencies Governance Framework* (the *Framework*) in February 2008.

The *Framework* was in response to *At a Crossroads: the Report of the Board Governance Task Force*. The Task Force's October 2007 report included recommendations to the government on board appointments, orientation and education, and evaluations. The Task Force also recommended that the Government of Alberta recognize the importance of agencies by passing, as a priority, an *Alberta Public Agencies Governance Act*[1].

The *Framework* outlines the Government of Alberta's policy on agency governance. The purpose of the *Framework* is to provide clear expectations on all elements of governance including accountability and transparency. In 2009, Bill 32 received Royal Assent and introduced the *Alberta Public Agencies Governance Act*.

Framework
provides adequate
guidance

We reviewed the *Framework* and concluded it provides adequate guidance to public agencies. The *Framework* includes specific information for boards on:

- recruitment and appointment of directors
- term lengths
- government representation on boards
- orientation and education of directors
- ethics and conflicts of interest
- evaluation of boards and directors

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[1] *Alberta Public Agencies Governance Act* (Bill 32), received Royal Assent on June 4, 2009, but has not yet been proclaimed in force.

- remuneration of boards
- use of committees

We also reviewed the *Act* and noted that it contains requirements related to the recruitment of members (directors) of public agencies. The *Act* requires public agencies to identify the skills and knowledge required of directors before the recruitment begins and to base the appointment on those attributes.

Evaluating board performance and reporting publicly—implemented

This recommendation has been substantially implemented as the *Framework* requires boards to evaluate director performance and board successes. The Agency Governance Secretariat is currently working with boards to implement the *Framework* by sharing evaluation tools and advice with boards.

The requirement for boards to publicly report their own performance against both Alberta public sector principles and their own governance policies is not explicitly included in the *Framework*. However, we believe that sufficient progress has been made on board evaluations to allow us to conclude that the recommendation has been substantially implemented. We continue to encourage the Agency Governance Secretariat to support such public reporting.

Alberta's Response to Climate Change—Part 2

In 2002, Alberta released its first climate change plan—*Albertans & Climate Change: Taking Action* and in 2008 updated it with—*Alberta's Climate Change Strategy.*

Our first report was in 2008

In October 2008, we reported on Alberta's systems to develop and report on its climate change plans and strategies (*October 2008 Report*, page 93). We examined the actions that the government planned to take to achieve its emissions reduction targets, including how implementing the *Specified Gas Emitters Regulation*[1] (the *Regulation*) would help in achieving those targets.

Our recommendations in 2008

We recommended that the Department of Environment create a master implementation plan for the actions necessary to meet its climate change targets. We found that the government had set targets based on modeling that included changes to the *Regulation*, but these changes were not included in the 2008 updated plan. We also found that there was no evidence to show that the particular actions in the updated plan would result in targets being met.

Also, we recommended that the Department improve its public reporting on Alberta's success and costs incurred in meeting climate change targets. We found that processes to ensure data reported is reliable and relevant had weaknesses. We also found the Department needed to be clearer in its public reporting that reductions made under the *Regulation* are emissions intensity reductions and not absolute reductions.

As the Department had not finished reviewing the reports required from facilities, we deferred our audit of the implementation of the *Regulation*.

1. Summary of our 2009 audit—monitoring compliance with the *Specified Gas Emitters Regulation*

What we examined

This report is about the implementation of the *Regulation*

This Part 2 report on Alberta's response to climate change covers the Department's implementation of the *Regulation*. Our audit objective was to determine whether the Department has adequate systems to ensure facilities comply with the requirements of the *Regulation*.

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[1] Alta. Reg. 139/2007

Why it is important to Albertans

The Regulation is key to Alberta meeting its targets

The *Regulation* is important because it establishes emissions limits for facilities that emit approximately 50% of the greenhouse gas emissions in Alberta. This legislative requirement was taken into account when the government established its long-term climate change targets. If this regulatory program doesn't deliver expected emissions reductions, the government will have to obtain more reductions in other areas than originally planned for or amend its targets.

Key to success is the Department's plan to use payments into the Climate Change and Emissions Management Fund to invest in initiatives and projects that support developing and implementing technologies that will reduce greenhouse gas emissions and improve Alberta's ability to adapt to climate change.

What we found

System is reasonable given the stage of its development

We concluded we could rely on the Department's system to ensure facilities reported their obligations in compliance with the *Regulation*. Our audit opinion on the financial statements of the Climate Change and Emissions Management Fund (Fund) is unqualified. However, in our opinion, the Department can make verifying compliance with the *Regulation* more efficient by implementing our recommendations.

The Department must also assess whether the *Regulation* is cost-effective.

What needs to be done

The Department has undertaken a significant amount of work. It implemented the system, one of only a few greenhouse gas regulatory systems currently in place, six months before the initially planned start date. The systems and processes including the offsets purchased by facilities are new and complex.

System needs these improvements

To strengthen the system the Department needs to:
- improve its guidance to facilities and verifiers
- improve the design and documentation of its technical review process
- strengthen its offset guidance and put a process in place to ensure the Alberta Emissions Offset Registry performs the work the Department needs
- amend its error correction threshold so that it also considers the dollar impact on the Fund of uncorrected errors
- collect sufficient information to assess the cost-effectiveness of the *Regulation*

2. Audit objectives and scope

Our audit objective was to determine whether the Department has adequate systems to ensure facilities comply with the requirements of the *Regulation*. We examined the systems that the Department uses to:

- ensure facilities submit accurate and complete data that complies with the *Regulation*
- measure the cost-effectiveness of the *Regulation*.

We examined the systems the Department had developed and implemented up to the end of July 2009.

The Department was in the process of assessing facility compliance reports and offsets for the 2008 compliance period when we concluded this audit. The Department was also assessing some of the offsets submitted for the 2007 compliance period.

3. Understanding climate change regulation

Greenhouse gas (GHG) regulatory systems follow a process of policy creation, results measurement, results verification and public reporting on achievement. Alberta's regulatory system also follows this process.

Policy creation

The Legislative Assembly of Alberta passed the *Climate Change and Emissions Management Act*[2] in 2003. Next, the *Specified Gas Reporting Regulation*[3] was created under the *Act*. Facilities emitting more than 100,000 tonnes of CO_2 equivalent emissions (CO_2e) have to report their emissions annually to the Department. The *Specified Gas Emitters Regulation*[4] (the *Regulation*) was established in 2007.

Regulation limits emissions intensity

The *Regulation* seeks to limit the intensity of emissions. It specifies a target level of emissions intensity for each facility that currently emits more than 100,000 tonnes of CO_2e annually. Emissions intensity is the ratio of the total annual CO_2e emissions to the total annual production as expressed in units of production. This ratio allows facilities a specified number of emissions rights for each unit of production added. If facilities have an emissions intensity higher than their specified target, they must either pay $15/tonne into the province's Climate Change and Emission Management Fund (the "fee" part of Alberta's system) or purchase emissions performance credits (EPCs) from

Facilities that exceed targets can pay into Fund or buy EPCs or offsets

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[2] S.A. 2003, c. C-16.7
[3] Alta. Reg. 251/2004
[4] Alta. Reg. 139/2007

another facility or offsets from a business that sells carbon offsets (the "trade" part of Alberta's system).

EPCs

EPCs are credits generated by facilities that have achieved decreases in emissions intensity beyond the required emissions intensity target. The Department allows these credits to be sold to other facilities or to be used in subsequent years.

Offsets

Offsets are emissions reductions (for example, wind energy projects) or removals (for example, reduced tillage projects) from activities occurring in Alberta. The activities that result in the reduction or removal are not required by law at the time the action is initiated.

Emissions intensity targets provide an incentive for facilities to become more efficient and reduce the emissions they generate per unit of production. However, since the targets incorporate the amount of production, the targets don't result in an overall cap on emissions unless facility production remains constant. Under such a system, it is possible that facilities could meet their emissions intensity targets and have increased their overall emissions if the level of production increases. Or alternatively, if the level of production falls, facilities may not have met their intensity targets even though they decreased their overall emissions.

Results measurement
The Department created guidance for facilities on the types of emissions they must report and the methods they must use to measure those emissions.

Measurement involves estimation

GHGs required to be measured by the *Regulation,* include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF_6). Facilities can measure the amounts of GHGs they emit, but there is always a level of uncertainty associated with the measurement even when facilities use continuous emission monitoring to directly measure the amount of each of these gases emitted. The measuring equipment provides measurements within a certain range of accuracy. Also, each non-CO_2 gas measurement is translated into CO_2 equivalents, using global warming potential factors, published by the Intergovernmental Panel on Climate Change, that also have a degree of scientific uncertainty.

Cost of measurement

The cost of measuring GHG emissions under the *Regulation* will depend on the type and complexity of industrial processes a facility uses and the extent to which it had GHG measurement systems in place before the *Regulation* was

passed. The costs would be more significant in facilities that have to buy new equipment to comply with the *Regulation*'s reporting requirements.

Results verification

Facilities have to provide a compliance report each year

Facilities that are subject to the *Regulation* are required to provide a baseline report to the Department. Each year, facilities are required to provide a compliance report indicating whether they have reduced their emissions intensity by the amounts required in the *Regulation*.

Different ways of checking accuracy of compliance reports

Governments can check the credibility of a facility's emissions reports by having their employees check the report at the facility. Or they can require a facility to hire an independent third party, called a verifier, to check the information supplied. In the first approach, governments incur the cost of the in-depth checking; in the latter, facilities bear the cost.

Department requires compliance report to be verified by a third party

The Department uses both approaches. It requires all facilities to have their reports independently verified. Companies (project proponents) who put together offset projects are also required to have the offsets independently verified. In addition, Department staff perform a desk review of facility reports and a trend analysis on the emissions and production of each facility. The Department also hires verifiers to perform re-verifications at a sample of facilities and in 2007 for all offset projects. The Department has developed guidance documents that identify the responsibilities of facilities, verifiers and offset project proponents.

Audits provide higher level of assurance

When governments use third parties to verify emissions reports, they must decide whether they require the third parties to perform an audit engagement or a limited assurance engagement. The third party provides a reasonable level of assurance in an audit engagement. Although not absolute, an audit is the highest level of assurance a third party can provide. In a limited assurance engagement (also known as a review engagement), the third party provides a moderate level of assurance. The Department requires verifiers to perform limited assurance engagements.

Department requires limited assurance level

An audit requires more extensive work to be performed to obtain the reasonable level of assurance and, therefore, costs more than a limited assurance engagement.

Assurance standards

The Department requires verifiers to follow one of three assurance standards:
- International Standards Organization 14064 Greenhouse gases—Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions

- Standards for Assurance Engagements, Canadian Institute of Chartered Accountants (CICA) Handbook—Assurance Section 5025
- International Standards on Assurance Engagements 3000—Assurance Engagements Other Than Audits or Reviews of Historical Financial Information

ISO 14064-3 reflects the specific requirements of GHG verification. The other two standards contain general guidance on providing assurance, but do not provide specific guidance on GHG verification. The application of all of these standards to GHG verification is relatively new given that regulation of greenhouse gases in the world is in its infancy.

Public reporting

For each compliance period, the Department of Environment reports payments into the Fund, offsets and emission performance credits that facilities submit. The Department publishes this information on its website.

Public reporting
planned for
2010–2011

There has not yet been a public report on Alberta's accomplishments and the costs incurred in meeting the climate change targets. We discussed the need for public reporting in our *October 2008 Report* (page 101). The government responded that public reporting is planned for 2010–2011.

4. Recommendations

4.1 Data quality

Recommendation

We recommend that the Department of Environment strengthen its guidance for baseline and compliance reporting by:

- **clarifying when uncertainty calculations must be done**
- **prescribing the minimum required quality standards for data in terms of minimum required frequency of measurement and connection to the period being reported on**
- **describing the types of data controls that facilities should have in place**

Background

Different GHG
measurement
approaches

There are multiple ways in which a facility's selection of the GHG measurement approach will impact the degree of uncertainty associated with GHGs. These approaches can have a material impact on the GHG emissions calculated. For example:

- monitoring frequency—limited data measurements taken once per year may not accurately represent seasonal variations in emissions produced from biological processes and data measurements taken outside the reporting

period may create material uncertainty as to the actual emissions during the reporting period

- level of accuracy for monitoring equipment—relying on certain types of flow meters for gas can create material uncertainty as these meters may be accurate to only +/-10%
- frequency of calibration of monitoring equipment
- conversion factors/models/calculation approach—changing from use of a factor for coal (as the fuel consumed) to direct measurement (of gases emitted) can materially change calculated emissions
- assumptions—using assumptions about GHG emissions based on gas volumes that do not contemplate, for example, the change in volume associated with temperature changes will result in an incorrect calculation

Uncertainty calculations allow both the Department and facilities to assess whether the data is potentially so inaccurate that another measurement and calculation method should be used.

The International Organization for Standardization (ISO) is a worldwide federation of national standards bodies.

ISO has developed standards for the measurement of GHGs. ISO 14064-1 specifies principles and requirements for organizations preparing GHG inventories.

Criteria: the standards we used for our audit

The Department of Environment should clearly define and communicate methodologies for calculating emissions and production.

Our audit findings

More guidance needed on when to do uncertainty calculations

The Department has not provided sufficient guidance to facilities on when they must do uncertainty calculations. The Department does not prescribe the data measurement methods or the calculation methods for estimating emissions. Instead, the Department recommends that facilities use one of four measurement and five calculation methods indicated in the guidance for estimating emissions.

The Department also allows facilities to use two other, less accurate, measurement methods and one other calculation method as long as the facilities can show that the level of uncertainty in the calculation would not materially affect the overall accuracy of calculation of emissions. The guidance would be clearer if examples were provided of the cases when an uncertainty analysis is required, rather than this general statement. The guidance would also be clearer if it indicated the methodology for completing the analysis.

ISO 14064-1 requires facilities to assess the impact of uncertainty on the data submitted. We consider this to be a best practice.

More guidance needed on data quality and controls

The Department has not provided sufficient guidance about data quality standards. There is no minimum data quality standard for calculating GHG emissions. We found two cases where facilities estimated emissions for a material emissions source using data collected during a period prior to the baseline period.

The Department has also not provided guidance on the kinds of data controls that facilities should have in place, such as:
- calibration of equipment
- checks over manual calculation processes
- computer controls over data entry, security and change management

Implication and risks if recommendation not implemented
If the Department does not strengthen its guidance, the opportunity to efficiently obtain higher quality emissions intensity reporting will be missed.

4.2 Guidance to verifiers of facility baseline and compliance reports
Recommendation No. 3
We recommend that the Department of Environment strengthen its baseline and compliance guidance for verifiers by improving the description of the requirements for:
- **the nature and extent of testing required**
- **the content of verification reports**
- **assurance competencies**

Background

Verification criteria

Verifiers use verification criteria to determine the type of procedures they should perform. Accuracy of emissions data is an example of a verification criterion. Checking whether meters that supply measurement data are accurately calibrated is an example of one of the procedures that may be used to test the accuracy of data.

Department requirements

The Department requires verifiers to provide a limited assurance engagement report on the baseline and compliance reports submitted by facilities. The Department also requires verifiers to report their sampling plan, verification criteria, procedures performed and uncorrected material and immaterial discrepancies identified from the verification.

The *Regulation* requires that the verifier:

Who can be a
verifier

- be either a professional engineer, chartered accountant or a professional
  with substantially similar competencies and practice requirements, and
- have technical knowledge of specified gas emission quantification
  methodologies and audit practices.

Criteria: the standards we used for our audit

The Department of Environment should plan what is needed to achieve the
objectives of the *Regulation* by clearly defining and communicating verifiers'
required competencies and the work verifiers are to perform.

The Department should establish verification criteria that provide relevant,
complete, reliable, neutral and understandable expectations for the evaluation of
the emissions and production calculations.

Our audit findings

System can be
more efficient

The Department's reliance on the work of the verifiers was reasonable. Our
observations below indicate how the Department can make the system more
efficient.

Verification guidance

The Department's guidance to verifiers explains that:

- there is a difference between a reasonable assurance (audit) engagement
  and a limited assurance engagement
- the normal procedures performed in doing a limited assurance engagement
  would not be sufficient for performing verifications under the *Regulation*
- additional data systems evaluation and data testing would be required
- the procedures performed would be more extensive or stringent than those
  performed in a financial statement limited assurance engagement, but not
  as much as the procedures performed in a reasonable assurance (audit)
  engagement

Our interviews with verifiers indicate more detail is needed for verifiers to be
clear about the extent of work the Department requires them to perform.

Guidance should
indicate
verification
criteria to be
reported against

Verification reports varied substantively in content and often were not sufficient
to meet all the needs of the Department. The Department specified that the
verifiers should use verification criteria derived from the *Climate Change and
Emissions Management Act*[5], the *Regulation* and the technical guidance
documents. The Department did not provide a detailed listing indicating the

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[5] S.A. 2003, c.C-16.7

minimum verification criteria and procedures that the Department expected the verifiers to perform and report against.

In some cases, the reports indicated that the verifiers used 5% of emissions intensity instead of 5% of emissions and/or 5% of production as the tolerance limit for error. Subsequently the Department told us that they wanted all three limits to be used by verifiers.

In the sample of reports we reviewed, only two reports explained how the verifier quantified the uncertainty with the data and evaluated that when considering the 5% tolerance limit.

A key requirement of this regulatory program is that facilities should use the same calculation methodology for the baseline and compliance periods. This is required because it is possible to meet the emissions intensity obligations by changing the calculation methods rather than by any improvement in efficiency. Testing of this requirement was not identified in all verifier reports.

The verification reports did not always disclose the size of the uncorrected errors. The Department's guidance also does not require that verification reports include a calculation of the cumulative impact of all uncorrected errors. Most reports in our sample did not contain this information. Such information makes it easier for the Department to determine that the cumulative uncorrected errors are within the 5% tolerance limit.

Verifier qualifications

Minimum assurance training requirements for verifiers were not defined

There is no guidance on the specific audit training that individuals performing verifications should have. For example, courses exist that provide training on GHG verification using ISO standards. The Department has not assessed whether these courses provide sufficient training for the purposes of this *Regulation* or communicated whether these courses are a minimum assurance requirement for verifiers. The Department has also not assessed whether the training required of environmental auditors (who are not chartered accountants or engineers) provides sufficient technical and auditing expertise.

Additionally, the Department allowed verifiers to use external resources for only up to 20% of the verification time because it did not want third-party verifiers to outsource verification. This means that chartered accountants had limited ability to hire technical quantification expertise, and engineers had limited ability to hire assurance expertise to fill in any competency gaps.

Implication and risks if recommendation not implemented

Having clear and sufficient guidance for verifiers makes it more likely verifiers will consistently provide all the information the Department needs.

4.3 Technical review

Recommendation

We recommend that the Department of Environment strengthen its technical review processes by:

- **requiring facilities to provide a process map with their compliance reporting and**
- **ensuring staff document their follow-up activity and decisions in the Department's regulatory database**

Background

Department staff perform reviews of baseline, compliance and offset reports

In the Department's review process, technical reviewers who are professional engineers, examine each baseline and compliance submission and its associated verification report. The reviewers use a checklist to document their findings and recommend to management whether to approve the submission or have it re-verified.

Facility process maps outline the processes a facility follows, its key emission sources and key pieces of equipment.

Criteria: the standards we used for our audit

The Department should monitor facilities' compliance with the *Regulation* by having cost-effective processes to enforce compliance and follow up on deficiencies.

Our audit findings

Technical review

Overall, we found that the Department had developed reasonable processes for the review. The reviewers detected errors indicating where more guidance is necessary.

Opportunities for improvement

We found the following opportunities to improve the Department's processes:

- The technical reviewer who completed the review checklist was not identified in the checklist.
- The reviewers entered only limited information into the review checklists, even in cases where they noted problems. This made it difficult to understand, without talking to the reviewer, how issues were followed up and resolved. This knowledge is lost when reviewers change employment.
- Generally, the reviewers did not contact the verifiers to clarify information in the verification reports or inquire about information that was missing, but needed by the Department. The Department told us that the reviewers

did not contact the verifiers because the Department does not have a contractual relationship with verifiers, who are hired by the facilities. This situation constrains the Department's ability to assess the verification process and results.

- Specific evidence standards were not in place for additional evidence facilities provide directly to the reviewers in response to questions arising during the review. The accuracy of this data was, therefore, not known.
- Facilities provided reviewers with narratives of the processes used at each facility. However, there was no requirement for facilities to provide process maps. These maps would be useful in helping reviewers understand the processes used at the facilities.

Implication and risks if recommendation not implemented

Without well-designed and documented processes to assess the quality of facility submissions and verification reports, the Department will not efficiently detect non-compliance with the *Regulation*.

4.4 Use of offsets to meet compliance obligations

Recommendation No. 4

We recommend that the Department of Environment:

- **strengthen its offset protocols to have sufficient assurance that offsets used for compliance are valid**
- **assess the risk of offsets applied in Alberta having been used elsewhere in the world**

Background

Offsets must meet eligibility criteria

Facilities that are subject to the *Regulation* can purchase offsets to meet their compliance obligation. Eligible offsets must meet criteria defined by the Department. Offsets must:

- result from actions taken on or after January 1, 2002
- be real, demonstrable and quantifiable
- not be from an action required by law
- have clearly established ownership
- be counted only once for compliance purposes
- be verified by a qualified third party to a limited level of assurance
- be based on action that occurred in Alberta

The Department also approved protocols that a project's proponent must follow to quantify the offset available from a project's emission reductions. The Department decided to allow only offsets created in Alberta. As a result, in developing the protocols, the Department needed to ensure that its protocols reflect relevant climate, temperature and soil conditions in Alberta.

The Alberta Emissions Offset Registry records offsets used for compliance

Once offset tonnes are verified, the project proponent may choose to register the tonnes with the Alberta Emissions Offset Registry administered by Climate Change Central. The Department does not require registration of verified offset tonnes until a facility submits the offsets to the Department to meet a facility compliance obligation. At that point, the Department requires the project documentation to be posted on the Registry website.

Offset guidance developed

The Department developed guidance documents for both the project's proponent and its verifier. All offset projects used for compliance in the 2007 reporting period were re-verified by verifiers hired by the Department.

GHG regulation is evolving in North America and the world. At this time, there is no one registry that records all of the offsets registered and used throughout the world.

Criteria: the standards we used in our audit

The Department's guidance for offset projects and for the verification of reductions from offsets should be sufficiently robust to ensure that the offsets are valid.

Our audit findings

Tillage guidance

The offset protocols allowed offsets to be claimed for activities that occurred in the 2002–2006 period, well before the timing of any verification activities. For the tillage protocol, the Department identified "farm records and an affirmation from the project developer" as the source of evidence for no-till and reduced-till practices, but did not indicate required sources of corroborating evidence to substantiate the records.

Need to define information to corroborate tillage

In our opinion, the level of evidence defined as acceptable by the Department falls below that which is necessary to provide assurance that the offset credits actually existed. The Department should work with project proponents to identify other sources of evidence that the proponents will be able to collect and the verifiers will be able to test. We acknowledge that in the 2007 compliance period, through the processes of verification and re-verification, the Department obtained assurance that verifiers collected corroborating evidence. We also acknowledge that, by the end of our audit, the Department was in the process of assessing the 2008 offsets used for compliance reporting.

The definition in the protocol for no-till and reduced-till practices uses the terms "tillage" and "cultivation" without defining them. The terms should be defined to ensure consistent understanding of tillage practices.

Eligibility guidance needs clarification

Landfill guidance

The offset credit project guidance document addresses project eligibility in several sections. However, the wording used to describe which projects are eligible is not consistent between different sections of the guidance document. As a result, there is increased uncertainty as to which projects should be considered eligible. For example, one section of the guidance document determines eligibility based on the date landfill gas is first combusted under controlled conditions or on the first date of system operation; another section bases eligibility on reductions being additional to what would otherwise have occurred in Alberta, prior to the release of the 2002 climate change plan.

These approaches can yield different answers. There is also no guidance given on the evidence that proponents should have in place to support being additional to what would have occurred otherwise.

Assumptions in protocols

The Department's offset protocols contain assumptions that affect the calculation of the emissions in the baseline activity which may not be accurate for all cases. For example:

- the landfill protocol has an assumption about the efficiency of an open flare which one verifier identified as potentially inaccurate.
- in the 2007 afforestation protocol, the baseline activity is presumed to be a prescribed burn of the land. Project proponents are not required to demonstrate whether this is a correct assumption for their land; therefore, they do not have to justify their claim for these credits. We acknowledge that the Department has since removed this protocol.

Protocols should require certain adjustments

None of the protocols are clear in requiring project proponents to adjust assumptions in the protocols about sources and sinks where they do not accurately reflect the sources and sinks for the project. As a result, projects may be verified in accordance with the protocols when in fact, the actual emission reduction or carbon sequestration is significantly different than that calculated using the protocol.

The offset credit project guidance document indicates that verifiers need to check whether project proponents have ownership. The guidance does not specify the controls and processes that should be in place when a project proponent does not obtain ownership, and is instead acting as agent for the owners of the credits. The guidance also does not indicate the procedures that offset project verifiers and compliance report verifiers should do to verify ownership in this case.

ISO 14064-2 identifies the principle of conservativeness in relation to offset projects. This is a key principle that exists to help ensure that offset projects do not overstate emission reductions. The Department's guidelines do not clearly incorporate this principle, which has general application on offset projects and acts to ensure any emission reductions claimed are real, particularly where uncertainty exists in relation to some of the data.

Processes to detect duplicate offsets

Process for checking for duplicates should be broadened

The Alberta Emissions Offset Registry has an automated process to check that tillage offsets are used only once in Alberta by checking the legal land description. While proponents are supposed to notify the Registry if ownership has changed, there is no automated process to check for non-tillage projects. There is also no process for any of the offset projects, other than an assertion by the project proponent, to confirm that the offsets have not been previously posted to another registry and sold elsewhere in the world.

The Department has not yet assessed the risk that offsets could be posted to another registry.

Implication and risks if recommendation not implemented

Facilities may meet their compliance obligations through purchasing offsets that are not valid.

4.5 Outsourced service providers

Recommendation

We recommend that the Department of Environment develop controls to gain assurance that data hosted or processed by third parties is complete, accurate and secure.

We also recommend that the Department of Environment formalize its agreement with its service provider for the Alberta Emissions Offset Registry.

Background

Outsourced services

Alberta Emissions Offset Registry

The Department relies on Climate Change Central (C3) to develop and administer the Alberta Emissions Offset Registry. C3 is responsible for ensuring:

- offset proponents provide all required documentation to support the offsets
- serial numbers are provided for all offsets
- changes in ownership are recorded
- there are no duplicate tillage projects on the Registry

- offsets that have been used to reduce facility compliance obligations are recorded

C3 is a not-for-profit company.

Criteria: the standards we used for our audit

The Department should implement reliable, secure and effective administrative systems to support the *Specified Gas Emitters Regulation*[6] program.

Our audit findings

We found that:

- The Department does not have a process to periodically verify that C3 is performing all functions the Department requires.
- The Department does not have a signed agreement with C3.

Implications and risks if recommendation not implemented

Without effective controls over services the Department obtains from outsourced service providers, the Department cannot demonstrate that its data is complete, accurate and will be available when needed.

4.6 Error correction threshold

Recommendation

We recommend the Department of Environment establish an error correction threshold that considers not only the percentages of emissions or production, but also the dollar impact on the Climate Change and Emissions Management Fund.

Background

5% error correction threshold

The Department requires facilities to correct errors found by verifiers if they exceed 5% of the total reported emissions and/or production, either individually or in aggregate.

Criteria: the standards we used in our audit

The Department should monitor facilities' compliance with the *Regulation* by having cost-effective systems to ensure facilities accurately and completely calculate and record fees owing to the Fund.

Our audit findings

Threshold doesn't consider the dollar impact in the Fund

The Department's guidance to verifiers indicates that it will not require facilities to adjust reporting errors if the error is less than 5% of emissions and/or production. When creating the error correction threshold, the Department

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[6] Alta. Reg. 139/2007

did not determine what the effect of this threshold could be in terms of revenue not being required to be remitted to the Fund. The Department later calculated that the maximum possible annual amount of errors tolerated under a 5% threshold would be approximately $130 million. This calculation assumes the unlikely scenario that all facilities made errors in both baseline and compliance reporting.

Notwithstanding the guidance provided to verifiers and facilities, the Department exercised its judgment to decide which errors below 5% should be corrected by the facilities and whether the correction should be done retroactively or prospectively. The Department did not create a formal guideline for its staff that would ensure facility errors less than the 5% were treated consistently. Nor did the Department quantify the dollar amount of the errors that it allowed to remain uncorrected.

Implication and risks if recommendation not implemented

The Department is unable to demonstrate that its error correction threshold is appropriate.

4.7 Cost-effectiveness of regulatory processes

Recommendation No. 5

We recommend that the Department of Environment assess the cost-effectiveness of the *Specified Gas Emitters Regulation*.

Background

The European Union Emissions Trading Scheme (the Scheme) is an example of one of only a few GHG reduction regulatory systems currently in place. The National Audit Office (NAO) in England recently concluded a review on the Scheme.[7] For the period reviewed by the NAO, the Scheme required companies to report CO_2 emissions, but not the emissions associated with other GHG gases. The NAO reported that companies responding to its October 2008 survey indicated "they had average annual costs of monitoring and reporting of £26,000 [approximately $46,000 CAD] and average annual verification costs of £9,000 [approximately $16,000 CAD]."

Criteria: the standards we used in our audit

The Department should monitor the cost-effectiveness of the *Regulation*.

Costs are those incurred by facilities and the Department in implementing the *Regulation*. Effectiveness is actual emissions intensity reductions in relation to targets.

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[7] European Union Emissions Trading Scheme: A Review by the National Audit Office March 2009.

Our audit findings
Benchmarking information

Department needs benchmarking information

The Department has information on the hours spent by verifiers and the costs of verifications only in cases where it required re-verifications. Having information on the hours spent and the verifier costs for all facilities would help the Department to better understand the verifications being done.

The Department does not collect information that would allow it to compare facilities' costs of preparing compliance reports to others, for example, in the NAO survey.

Modeling information to assess facility emission reduction costs

Model used to predict effect of contribution rate on emissions reductions

The main purpose of the *Regulation* is to support Alberta's commitment to take effective action on climate change. The Department uses a model to estimate the amount that the $15/tonne contribution rate would have to increase before facilities would choose to make emissions reductions instead of contributing to the Fund.

The Department uses a model partly because it has concluded that obtaining such information from facilities would be difficult. Instead, the Department plans to test the accuracy of the model if and after the Department changes the contribution rate. Even though it may be difficult to obtain direct information from facilities, we believe it would be preferable to test the accuracy of the model by getting information from the facilities prior to making any rate changes.

Reasonable assurance versus limited assurance

The Department decided to have verifications for baseline, compliance and offset reports at a limited (moderate) assurance level instead of a reasonable (audit) level of assurance.

More information needed to assess appropriate assurance level

European firms required to comply with the Scheme must have their emissions verified by third parties using an audit level of assurance. The Government of Canada's proposed offset program also requires verification to be done using an audit level of assurance. The Department should seek to understand why these regulators chose an audit level of assurance.

Implication and risks if recommendation not implemented

The Department will not know whether the results achieved by the *Regulation* justify costs incurred by the facilities and the Department.

Public Affairs Bureau—Media Contracting Services

1. Summary

What we examined

Government uses media buyer to purchase media services

From 1996 to 2008, the Public Affairs Bureau (PAB) contracted Highwood Communications Ltd. (Highwood) as its Agency of Record for Media Buying (Media Buyer), to arrange and purchase media services for government. The contract required Highwood to buy print and electronic media services on PAB's behalf, for which Highwood earned a 4% service fee.

Contract expires every three years

To ensure a competitive process, the media buying contract expired every three years. The contract was awarded to Highwood on three occasions. After the most recent competition, PAB awarded the contract to DDB Canada, in June 2008.

Media buyer unable to pay its creditors

In July 2008, Highwood filed a *Notice of Intention to Make a Proposal (Proposal)* under the *Bankruptcy and Insolvency Act (BIA)*,[1] as it could not pay $5.3 million of liabilities due to its creditors. We estimate that at least 35% of these liabilities related to government media purchases, where the government had paid Highwood in full but Highwood had not paid the actual service suppliers.

Our audit examined how the PAB monitors terms and conditions of its media buying contract. We did not audit Highwood's books and records or examine the reasons for its business failure, as this falls within the purview of the *BIA*.

Why this is important to Albertans

Government spends about $6 million a year on media buys

Each year, the Alberta government spends about $6 million to communicate with Albertans through various media campaigns. These campaigns range from telling the public about a new government program to making public service announcements about fire bans, for example. Albertans need to be confident that public funds for these media services are spent wisely.

What we found

Government has adequate systems to monitor contract

We found that PAB and the departments have adequate systems to monitor the media services contract. The PAB and departments followed good practices, paying the Media Buyer's final invoices only after ensuring that the media

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[1] *Bankruptcy and Insolvency Act,* R.S.C. 1985, c. B-3.

services were actually received. Overall, we found the government received the media services it paid for.

PAB monitoring new media buyer

The PAB did not obtain assurance from Highwood that it was paying its creditors and was therefore unaware of Highwood's deteriorating financial condition. The PAB has chosen to require its new contractor, DDB Canada, to regularly demonstrate that it pays its suppliers of media services for work performed on behalf of the government.

Government at risk if media supplier not paid

The Media Buyer's nonpayment of media suppliers may pose certain risks to the government, such as disruption of media services. In addition, there may be other risks that the government has not fully assessed, such as:

- not receiving services already fully paid for
- damage to government's reputation
- exposure to potential claims of liability

PAB has other contracts requiring risk assessments

These risks may also apply to other PAB contracts. The PAB has three other Agency of Record contracts for human resources recruitment, legal tenders and informational advertising. PAB has not conducted an assessment of the potential risks associated with these contracts. A risk assessment would help government identify and manage its risks.

What needs to be done

The PAB needs to assess its Agency of Record contracts to identify risks such as disruption of services, and develop ways to manage these risks.

2. Audit objectives and scope

How well does PAB monitor media buying contract?

Our objective was to examine how PAB monitors the service contract with its Media Buyer. Our scope was to examine contracts with Highwood Communications Ltd. from 1996 to 2008, as well as the contract currently in place with DDB Canada. We examined documents and conducted interviews at several government departments, as well as interviewed Highwood's management and the Trustee in Bankruptcy (Trustee) who administered Highwood's *Proposal* under the *BIA*.

Did not audit Highwood's books and records

We did not audit Highwood's books and records relating to payments it received from government; nor did we examine the reason for its financial difficulties. That is the responsibility of the Trustee.

3. Background

PAB coordinates government media buys

The PAB is a branch of the Government of Alberta's Ministry of Executive Council; it assists government departments in purchasing media services. The PAB coordinates all advertising competitions for the Government of Alberta and manages all cross-government advertising contracts.[2] It is also responsible for developing, implementing and monitoring compliance with the government's communications objectives as well as its advertising policy and procedures.

Media buying process

The PAB contracts the government's media buying requirements to its Media Buyer. The Media Buyer works directly with advertising service providers to supply media services to the government departments. It is the Media Buyer's responsibility to:

- negotiate rates for media services
- coordinate the purchase of media time or space
- prepare insertion orders
- provide post-buy analyses to departments or programs
- facilitate invoicing and to pay suppliers
- report on all the advertising buying activity to PAB

Government deals with media buyer—not media suppliers

The government has no direct contractual relationship with media suppliers. Rather, the Media Buyer contracts directly with media suppliers and is responsible for paying them. The Media Buyer then submits its invoices to the departments that actually received the services.

Media buyer receives 4% service fee

Highwood made annual purchases from media suppliers such as newspapers, radio and television stations in the range of $4.6 to $7.6 million and received a 4% service fee on these purchases. The contract did not have a maximum amount. The following table illustrates payment details:

Yearly media buys

Fiscal Year	Payments to Highwood[3]	Media Portion	Highwood's Service Fees
2007/08	6,766,336	6,506,092	260,244
2006/07	6,465,101	6,216,443	248,658
2005/06	7,595,533	7,303,397	292,136
2004/05	5,525,864	5,310,331	215,533
2003/04	4,590,844	4,414,273	176,571
Totals	**$30,943,678**	**$29,753,536**	**$1,190,142**

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[2] Contracts for advertising include employment openings, program changes and other issues that the government needs to provide information with the public.

[3] As reported in the *General Revenue Fund – Details of Grants, Supplies, Services, Tangible Capital Assets and Other Payments by Payee.*

Media purchase process

The process for media purchases was that:

- A department would contact Highwood directly, outlining media details and dates for the campaign.
- Highwood would make the media buy requested by the department.
- Following the industry's standard practice, Highwood would pre-bill, and the department would pre-pay up to 80% of the media costs and Highwood's service fee.
- Highwood would send a final invoice for the remaining 20% of the media cost and Highwood's service fee directly to the department.
- Highwood prepared quarterly reports on media spending, which they distributed directly to the departments and PAB.

Highwood files *Proposal*

In June 2008, PAB awarded the Media Buyer contract to DDB Canada. On July 11, 2008, Highwood filed a *Proposal* under Part III of the *BIA*. A Trustee administering the proposal determined that Highwood had $5.3 million of liabilities to unsecured creditors and realizable assets of only $2.1 million.

Trustee's role

Under the *BIA*, a Trustee is licensed by the Superintendent of Bankruptcy to administer proposals and bankruptcies and manage assets held in trust. A Trustee can give a debtor information and advice about the proposal and bankruptcy processes and must make sure that the debtor's rights and the creditor's rights are respected. A Trustee has a mandate to locate and secure assets on behalf of the estate for the benefit of creditors.

4. Our findings and recommendation

PAB's Agency of Record risk assessment

Recommendation

We recommend that the Public Affairs Bureau conduct a risk assessment of its Agency of Record contracts and develop a plan to manage the risks it identifies.

Background

Highwood media buyer from 1996 to 2008

The PAB signed a Media Buyer three-year contract with Highwood in 1996 and 1999. The 1999 contract had a one-year extension. In 2003, PAB and Highwood signed a third three-year Media Buyer contract. This contract was extended twice. All contracts were awarded through an open competition.

DDB Canada becomes media buyer in 2008— Highwood files proposal

In June 2008, PAB signed a contract with DDB Canada as the Media Buyer. In July 2008, Highwood filed a *Proposal* under Part III of the *BIA*. At the time, Highwood had liabilities of $5,260,746, and realizable assets of $2,064,000.[4] Determining the exact amount of liabilities that related to government media

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[4] As reported by the Trustee. This would include expenses for government and non-government media buys.

buys would have required considerable audit work at Highwood and its service suppliers, which was beyond the scope of this audit. However, on the basis of a high-level analysis, we estimate that at least 35% of Highwood's liabilities related to government media buys.

Criteria: the standards we used for our audit

The PAB should have effective processes to assess risks and benefits when entering into business contracts.

Our audit findings

PAB now monitoring media buyer to ensure creditors paid

We found that PAB has adequate systems in place to monitor the service contract with its Media Buyer and that the government received the media services it paid Highwood for. In 2008, PAB introduced a system for monitoring the Media Buyer's payments to media suppliers after conducting a risk assessment of this contract. However, PAB has three other Agency of Record contracts[5] that have not been assessed for risk issues.

Departments have adequate systems to pay invoices

We found that the departments have adequate systems for paying the Media Buyer's invoices. There are close working relationships between department communications branches and program areas. The Media Buyer's invoices were usually sent first to a department's communications branch for processing. The communications branch would then ensure the campaign associated with the invoice was running and, to the extent possible, confirm that the various media activities were taking place. The communications branch would forward the invoice to the department's program area for their approval and payment.

Media buyer provides valuable service

The departments told us the Media Buyer provides a valuable service. We heard numerous positive comments about a Media Buyer's value, from coordinating various media buys on short notice to providing guidance as to the best ways to reach various target audiences. We were also told that this service would generally not be something that government employees could provide, because it requires constantly updated industry experience and contacts.

DDB Canada contract different from Highwood's contract

The DDB Canada contract signed in 2008 had several differences from the 2003 Highwood contract. These changes included:

- The Media Buyer's advanced bill, and therefore the department's pre-payment of media services, has increased from 80% to 100% of the media costs and service fee.

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[5] These agencies provide human resources, legal tender and informational advertising services.

- The Media Buyer now keeps tear sheets[6] or other service confirmations on their files instead of submitting them with invoices to the departments. The invoices are paid before the tear sheets are available.

Increased risk, PAB monitoring DDB Canada

Under their current contract with DDB Canada, PAB has implemented a process to verify that media service providers are being paid by the Media Buyer. The process to verify that the Media Buyer is paying the media suppliers has added importance as the pre-payment of the Media Buyer's invoices has increased from 80% to 100%.

PAB has other contracts requiring risk assessment

Given its experience with Highwood and the risks associated with pre-paying for services, PAB should conduct a risk assessment of its contractual arrangement with its three other Agencies of Record. This assessment would include:
- identifying the risks associated with each contract, whether they are financial, legal or reputational
- evaluating the level of risk PAB is prepared to take
- identifying ways to manage or mitigate the risk

A risk assessment would help PAB make informed decisions as to the level of risk it is prepared to take and then establish a plan to manage that risk.

Implications and risks if recommendation not implemented
Without a risk assessment of the contracts, the Public Affairs Bureau may be unaware of the level of risk it is taking on, which may lead to financial loss, damage to reputation or a disruption in communications to the people of Alberta.

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[6] "Tear sheets" denotes a page cut or torn from a publication to prove to the client that the advertisement was published.

Electronic Health Records

1. Summary

What is an electronic health record?

EHR is a summary of an individual's health history and care

Conceptually, an electronic health record is a summary of an individual's key health history and care. Ideally, such a record would be available electronically to authorized health care providers anywhere in Canada, at any time, and accessible online from many separate yet compatible computer systems within a network. The terms electronic health record (EHR) and electronic medical record (EMR) have recently gained widespread use, and are often used interchangeably. Electronic health records allow health care providers to view a patient's medical history, including laboratory results, diagnostic images and prescribed medication. An EMR, by contrast, is an electronic record maintained by a physician; it may or may not be shared with other health care providers.

An electronic health record is made up of information from a variety of sources including hospitals, clinics, pharmacies and laboratories (i.e., health care providers). The record contains several key data elements that are critical for treatment. This information is collected through a common system accessed by health care providers and stored in a series of databases.

What we examined

EHR consists of many systems

We assessed whether the Department of Health and Wellness has effective processes to manage the implementation of electronic health record systems for Albertans. Physically, an electronic health record exists in many systems that reside in many locations throughout the province, under the control and direction of multiple organizations.

The scope of our audit was limited to examining the components of the EHR systems that are funded using taxpayers' dollars. Our audit did not include non-government entities such as clinics, pharmacies and laboratories. Nor did we examine systems in hospitals for collecting patient information. When we refer to the EHR systems, we are only referring to systems within the scope of our audit.

Auditing concurrently with five other provinces

Concurrent with our audit of the Alberta EHR systems, five other provincial audit offices will audit how electronic health records are being implemented in their respective jurisdictions. In addition, the Office of the Auditor General of Canada is auditing Canada Health Infoway's processes for distributing federal funds to each jurisdiction. The provincial audit offices will each report

separately; the Office of the Auditor General of Canada will issue a joint summary report on all of the audits in 2010.

Why it is important to Albertans

EHR systems should be efficient and cost effective

Increased costs of health care, the high level of interaction necessary between health care specialists, and the fundamental principle of responsible management of taxpayers' money, make it paramount to ensure that health care is delivered in the most cost-effective way possible. An electronic health record is a means to save money and improve health care by automating the collection and retrieval of critical health care information.

An EHR should be complete, accurate, available and confidential

Health care in Alberta has traditionally been a paper-based system. For example, to treat one patient, physicians, nurses and physiotherapists each may create, and need to access, separate records. For this information to be effective for treating patients, it should be complete, accurate, and available when needed. Patient information should also be protected so that individuals do not suffer as a result of misuse of their personal information.

Other countries already have EHRs

Many countries, including Canada, have looked at information technology as a solution for providing cost-effective and efficient health care. It is widely believed that fully functional EHR systems will save lives and reduce health care costs. Countries such as New Zealand, Denmark, the Netherlands, the United Kingdom and Australia have adopted an electronic health record for recording and tracking patient events.

What we found
Accountability

No integrated delivery plan that connects initiatives

The Department does not have a documented integrated delivery plan that connects the detailed plans of each of the many initiatives that make up EHR systems to the priorities of the strategic plan. Communication of strategic priorities and resourcing decisions was not always consistent and clear. Reporting of progress to decision makers was not regular or complete—as a result, decision makers do not always have the information necessary to make informed decisions.

Governance of EHR is by committee

The Minister of Health and Wellness is responsible for health care in Alberta. The Department of Health and Wellness has worked on developing and implementing a province-wide EHR since 1997. The governance of the EHR systems has evolved through collaboration of the Department, Alberta Health Services, and various stakeholders (physicians, laboratories, pharmacies, etc.). The Department implemented a governance structure that includes representation from all participating organizations. Governance of the EHR

systems is by committee, with the Deputy Minister of Health and Wellness chairing the EHR Governance Committee.

Collaborative governance requires common understanding

To ensure accountability, all parties must have a common understanding of the strategic priorities and decisions regarding allocation of resources. This common understanding is typically communicated through a series of planning documents consisting of a strategic plan, an integrated delivery plan, and detailed project plans. In addition, to hold each party accountable for their actions, there should be thorough and timely reporting of progress made on all aspects of the EHR systems.

Project management

Project management practices should be followed

In the current economic climate, where dollars are scarce, and the government's priority is to ensure that public money is spent on viable and effective programs, it is important that appropriate project management practices be followed which clarify the benefits and costs of the significant investment in EHR systems.

Information on cost of EHR systems not shared

As of March 31, 2009, the Department estimates that it alone has spent $615 million on building components of the EHR systems. The Department has cost information for each project within an initiative. However, that information is not summarized and shared. The Department has not calculated the total cost for all the EHR systems it funds (for example, the $615 million does not include costs incurred by regional authorities on components that are part of the EHR systems). We noted in our audit that budgets and costs are managed at the project level, and not at an overall EHR systems level.

No current business case combining all projects

The Department was not able to provide us with a combined business case for the EHR components it funds—one that compares the total cost of the systems (i.e., the sizeable investment that the Government will cumulatively be asked to make) to the benefits (i.e., the anticipated cost savings and the improved quality of health care that will result once the EHR systems have been completed). This consolidated view should aggregate all of the many projects that make up an electronic health record, and show how changes or delays in individual projects impact the completion of the EHR systems.

Security

Shared responsibility for protecting patient information

The Department shares responsibility for protecting health care information with all other custodians.[1] That is, there is no one organization that is responsible for ensuring the protection of health care information. Security functions, like assigning access to Netcare (a web-based portal that allows users

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[1] As defined in Part 1 Section 1(1)(f) of the *Health Information Act*

to access patient information), monitoring what users are doing with their access, and auditing to detect unauthorized access, are performed in part by each stakeholder.

Monitoring of access to Netcare is reactive

We expected the Department would be reviewing Netcare access proactively and frequently, but found that monitoring was reactive. We also found that for a period of three months, no review of user access in Netcare had been performed. Users' access in Netcare was not always suspended or disabled as soon as the user no longer needed access.

What needs to be done

The Department needs to improve its management of the electronic health records project by:

- working jointly with Alberta Health Services and governance committee members to:
  - maintain an integrated delivery plan that aligns with the strategic plan
  - improve systems to regularly report costs, timelines, progress and outcomes (see recommendation on page 73)
- executing publicly funded electronic health record projects and initiatives in accordance with established project management standards (see recommendation on page 75)
- proactively monitoring access to the Netcare portal (see recommendation on page 78)
- removing user access to the Netcare portal when access is no longer needed (see recommendation on page 80)

2. Background

Canada-wide initiative

Canada-wide initiative

In 2000, as part of the First Ministers' Agreement, Canada's political leaders identified development of an electronic health record as their top priority in health care. This commitment was subsequently reinforced in the *2003 Accord on Health Care Renewal* and in the 2004 *10-Year Plan to Strengthen Health Care.*

Federal funds flow through Infoway

The Government of Canada established Canada Health Infoway (Infoway) in September 2000. Its mandate is to "accelerate the development and adoption of modern systems of health information and to define and promote standards governing the health info-structure to ensure [compatibility]." From Infoway's inception to the end of 2006, the federal government provided $1.2 billion in funding for electronic health records, tele-health and public health surveillance solutions.[2]

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[2] Canada Health Infoway "Electronic Health Records: Canada's next generation of health care at a glance"

All jurisdictions participated

Infoway membership consists of Deputy Ministers of Health from all 14 federal, provincial and territorial governments. Infoway coordinates the work of health ministries, regional authorities, other health care organizations and information systems vendors. Together, their goal is to develop a compatible network of electronic health record solutions across Canada—linking hospitals, clinics, pharmacies and other points of care.

Objective is to improve health care

The objectives for creating a Canada-wide electronic health record are to reduce wait times, increase patient participation in health care, make management of chronic diseases more efficient, improve access to health care in remote and rural communities, reduce adverse drug interactions, and improve drug prescribing practices.

Working towards compatible EHR systems

The Department is working with ministries from federal, provincial and territorial jurisdictions to create cross-jurisdictional EHR systems that are compatible with the electronic health records of all Canadian jurisdictions.

Canada Health Infoway, in the document *EHR 2015 Advancing Canada's Next Generation of Healthcare* on page 62,[3] has described the goal of the Canada-wide approach as:

1. "Ensure the EHR elements are built with consistent standards, thereby enabling future interoperability within and across jurisdictions and simplifying the movement of knowledge and people across jurisdictions.
2. Serve as a catalyst for new infrastructure developments and ensure common platform quality across all jurisdictions.
3. Where possible, encourage cooperation, thereby eliminating redundancy and duplicative efforts in systems design, vendor negotiations, etc.
4. Reduce long-term costs and implementation time by leveraging scale and cross-jurisdictional knowledge."

EHR is partly funded by Government of Canada

The development of EHR systems in Alberta is partly funded by the Government of Canada through an agreement with Infoway. Each province or territory is entitled to receive funding from Infoway for eligible expenses. It is the role of the Department to propose projects to Infoway for funding and to implement the projects. Of the estimated $615 million that the Department has spent on EHR systems, $61 million was reimbursed by Infoway. Current funding agreements with Infoway allow for an additional reimbursement of up to $47.6 million.

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[3] Canada Health Infoway "*EHR 2015 Advancing Canada's next generation of healthcare*" page 5
http://www2.infoway-inforoute.ca/Documents/Vision_2015_Advancing_Canadas_next_generation_of_healthcare[1].pdf

Key activities in development of EHR systems in Alberta

Some of the major activities that have been central to the development of the provincial EHR systems to date are listed in the following table:[4]

Year	Event
1997	Alberta Wellnet, the predecessor to the EHR systems, is formed to develop and deliver province-wide EHR initiatives.
1998	Alberta Supernet, a province-wide high speed broadband Internet network, established to provide required Internet services is developed.
1999	The Pharmaceutical Information Network (PIN) was piloted and deployed as the Seniors Drug Profile.
2001	The Physician Office Systems Program established to lead the adoption of Electronic Medical Records within physician offices across the province.
2002	Premier's Advisory Council recommended implementing province-wide EHR systems, and PIN became the drug information component of the Alberta EHR.
2003	Alberta EHR systems were launched province-wide and physicians across the province were able to get connected.
2004	Capital Health launches Netcare, Alberta's seven rural health regions form RSHIP (Regional Shared Health Information Program) and pharmacies begin to send drug dispensing information.
2005	The Premier announces that all Albertans would have an electronic health record by 2008; Calgary Health Region begins to implement an enterprise-wide single clinical information system.
2006	Alberta Netcare Portal 2006 deployment begins; the Provincial Diagnostic Imaging strategy is adopted and begins delivery; Provincial Registries initiatives are underway.
2007	Legislation requires mandatory submission of dispensing information from pharmacies, system to system functionality begins to enhance the overall integration of physician offices and pharmacies with electronic health records, the Provincial Health Information Exchange (pHIE) initiative begins, delivering lab results electronically to physician offices.
2008	RSHIP, which represented the seven rural health regions, was disbanded; transition to a new model based on a North/South model (more in line with referrals patterns across the province) is underway.
2009	The nine regional health authorities are consolidated into Alberta Health Services (AHS).

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[4] Alberta Health and Wellness, *Provincial Health IM/IT Strategic Plan 2008/09-2010/11*, pgs. 13–14

Ministry's strategic goals

The Ministry's strategic goals for EHR systems are increased:
- accessibility of health services
- patient satisfaction with health services
- quality of care
- productivity of the health system

EHR systems and repositories

The systems and repositories that make up the EHR systems include:
- registries—various systems that store patient, health care provider and health care delivery site information
- repositories—various systems that store patients' drug, laboratory, diagnostic imaging and text report information
- health information exchanges—three systems that verify message formats and ensure reliable delivery of information (Provincial Health Information Exchange, Cloverleaf Regional Health Information Exchange, Calgary Regional Health Information Exchange)
- Netcare portal—system that gathers information from various other systems and allows users to view a patient's complete health record online
- health care providers—various systems that store information that health care providers use, such as wait times management, public health, pharmacy, radiology, laboratory and physician information
- physical infrastructure—servers, networking devices and facilities

Netcare portal

Netcare is central to the EHR systems

At the centre of Alberta's EHR systems is the Netcare portal, a web application that brings information from a number of different sources into one location, allowing users of the portal to view that information easily. Netcare was first implemented by the former Capital Health Region to provide information on patients in the region. As Alberta developed EHR systems, the Department adapted Netcare to integrate health and demographic information on patients from all health regions.

The Department continues to develop the Netcare portal. In its current form, Netcare provides access to the following information submitted by providers:
- drug prescription information
- laboratory reports
- diagnostic images such as x-rays
- limited text reports of physician notes
- demographic information such as a patient's health care numbers, address, age and gender

EHR data is combined from many sources

An electronic health record combines data from a number of different sources to provide an integrated view of a patient's medical history through Netcare. The Department often uses Netcare to refer to all EHR systems. For purposes of this report, we refer to the complex array of interrelated systems as the EHR systems and reserve the name Netcare for the portal through which users gain access to information in the EHR systems.

Main participants in the EHR systems

EHR systems are managed by many participants

For each of the data components of the EHR systems, several organizations within AHS may be responsible for developing and managing the systems that store the data. For example, AHS maintains three patient registries: one registry in Calgary and two in Edmonton. Although AHS is responsible for all health regions, each region continues to operate independently in its day-to-day operations.

Participants use different systems to provide EHR data

Various organizations (physician's offices, pharmacies, labs, hospitals, etc.) use disparate systems to provide information for the electronic health record. Furthermore, organizations that contribute information to EHR systems have a complex array of relationships with each other. Complex EHR systems require clear leadership in the form of direction on strategy, policy and standards from a central authority. The Government of Alberta has assigned this responsibility to the Department.

The Department and AHS share primary accountability and oversight for the outcomes of the EHR systems, with ultimate accountability residing with the Minister. Given the relatively recent establishment of AHS, work is underway to clearly articulate roles and responsibilities toward eliminating ambiguity and ensuring reliable accountability and oversight for EHR planning and implementation.

Many systems are incompatible with each other

Managing a complex, interdependent EHR infrastructure is a significant challenge. Alberta's EHR systems have been built component by component as they have evolved. They have been built recognizing that the health system is a complex and diffuse operation with many key players, and with electronic systems that have evolved over a number of years. For example, legacy environments, such as incompatible electronic medical records in many physicians' offices and incompatible hospital clinical systems have, and continue to require, costs of custom integration with the EHR.

Alberta is now focused on the development of an integrated vision, plan and roadmap recognizing the challenges of the distributed model and the benefits of an integrated vision and plan detailing the combined strategies, priorities, benefits and required resources.

Our review of the EHR systems focused primarily on information technology, governance, project management and security and privacy aspects. We have recommendations for improvement in each of these areas, as described in the following sections.

3. Audit objectives and scope

Audit objectives

Our audit
objective

We conducted our audit to determine whether the Department and AHS have appropriate and effective mechanisms in place to guide, monitor and report on the implementation of EHR systems. Our audit considered:

1. Do the Department's plans focus on developing consistent and compatible EHR systems?
2. Is the Department managing EHR projects based on a recognized project management methodology and are they achieving expected results?
3. Does Department management receive the information it needs to make decisions about implementing EHR systems?
4. Can the Department demonstrate that there are appropriate privacy and security mechanisms in place to access electronic health records?

Audit scope

Our scope

Our audit evaluated the projects funded by the Department and partly reimbursed through funding agreements with Infoway. These agreements set out the scope of work and criteria for eligibility of expenditures for projects such as diagnostic imaging repositories and Netcare.

Federal funding agreements do not cover all EHR projects. To evaluate if a consistent project management methodology is followed throughout EHR systems, our audit included projects funded entirely by the Department as well as projects funded by Infoway.

Netcare

We evaluated
Netcare controls

Alberta's Netcare portal is a web-based gateway that allows health care providers to access an individual's health information. While Netcare is currently maintained by AHS, monitoring of access controls remains the responsibility of the Department. Therefore, we evaluated the Department's and AHS's processes for ensuring adequate controls over maintenance and security of Netcare.

Provincial Health Information Exchange

We evaluated
pHIE controls

The Provincial Health Information Exchange (pHIE) will allow information systems belonging to health care providers to interface with EHR systems.

pHIE is maintained by AHS—we evaluated their processes for ensuring adequate controls over its maintenance and security.

Limits to audit scope

Audit limited to publicly funded systems

Each clinic, doctor's office, hospital and other health care provider can also have access to EHR systems. These entities are out of scope for this audit. However, we did evaluate the Department's processes for ensuring that each health care provider implements and maintains appropriate access controls for Netcare.

Audit partners

Audit conducted in collaboration with other legislative offices

We conducted this audit with other Legislative Auditors across Canada, including the Auditor General of Canada. The purpose of this collaborative effort is to apply a consistent assessment of EHR systems across Canada. The results of our audit will assist the Auditor General of Canada in its audit of Infoway's systems for funding and supporting EHR systems across Canada.

4. Conclusions

We have concluded against our four audit objectives. For further detail on each criterion see Appendix—page 85.

Objective 1—Plans for EHR systems

Roles and responsibilities need to be clearly documented and communicated

The Department has a shared governance model in place for the EHR systems. While we do not question the use of this model, our audit noted that the roles and responsibilities for key oversight requirements need to be clearly documented and communicated. The Department's primary focus is to ensure compatibility of EHR systems within Alberta. As well, Alberta is committed to the pan-Canadian vision and to ensuring compatibility across Canada.

An integrated delivery plan needs to be completed

The Department also needs to prepare an integrated delivery plan, for the components that it funds, that links the priorities of each EHR initiative to the objectives of the strategic plan. The integrated delivery plan should be supported by detailed plans for each initiative.

Objective 2—Project management

Department needs to demonstrate that it is achieving expectations

The Department is managing EHR projects based on a recognized project management methodology; however, the Department cannot demonstrate that it is achieving expected results.

Department needs to justify why project should continue

The Department needs to improve project management processes by ensuring that there is appropriate business justification to continue with each project, initiative and the EHR system as a whole.

Projects need to comply with project management framework

The Department also needs to ensure that all publicly funded projects comply with established project management standards. Improvements need to be made in the areas of:

- quality management
- schedule management
- documentation and records management
- risk management
- cost management

Objective 3—Report of EHR systems' progress

Department needs to track and report on total costs

Key members of the Alberta Health and Wellness executive committee are members of the EHR Governance Committee, and in this management capacity receive information to make decisions about implementing EHR systems. The Department does not track total costs incurred for EHR systems, and no evidence was found that initiative level financial information was regularly reported. Given the absence of financial reporting, the EHR Governance Committee, as the key management body, is not provided with the information necessary to regularly monitor and assess costs, timelines and progress.

Objective 4—Privacy and security

Department needs to regulary review access to Netcare

The Department was not regularly reviewing access to Netcare. User access to Netcare was not always disabled when employees no longer needed access. EHR privacy and security issues are managed using a federated model with each stakeholder responsible for their own environment. The Department has some processes in place to demonstrate that privacy and security mechanisms have been implemented.

The following questions remain after having completed our audit:
What is the total cost of the EHR systems?
The Department has not developed a comprehensive business case for the EHR systems. Because the systems are continually changing, it is difficult to determine the total cost of the system to date, or the projected final cost. The Department manages each project individually and budgets for capital dollars on an annual basis. The Department is able to estimate what it has spent on all the projects, but does not have information on actual or estimated amounts spent by the regions and other stakeholders; therefore, it does not have estimates or the actual cost for the EHR system to date.

The Department has no forecast of its cost to complete the EHR system as currently outlined in its strategic plan.

What are the cost savings from using electronic health records?
It is not clear how the Department will demonstrate savings achieved by using
EHRs. Although it is expected that there will be cost savings through better
treatment, and improved delivery of health care, and more efficient processes,
the Department does not have a baseline to compare against. The RAND
Corporation estimated that the health care industry in the United States could
obtain savings ranging from 5% to 20%. The largest component of the savings
is gained by improved efficiencies in health care delivery.

The Association of Chartered Certified Accountants in collaboration with the
European Commission Information Society Directorate–General completed a
study of Denmark's EHR implementation.[5] The study found that electronic
patient referrals could save the government €5.02 per referral or €3.5 million
annually. These savings were based on calculating the cost differences between
processing referrals electronically versus processing them manually. If we
achieve the same efficiencies, potential savings for Albertans on patient
referrals only would be about $1.10 per capita or $3.8 million. TIME[6] also
reported that Denmark's EHR system was able to save doctors "an average
50 minutes a day of administrative work."

What are the benefits in implementing an electronic health record system?
A study[7] conducted by the RAND Corporation identified reduced medication
error and improved adverse drug event rates as benefits gained by using
electronic health records. The study also identified disease prevention and
chronic disease management as other benefits.

The Department has made progress developing key benefits evaluation
components. For example, a Benefits Logic model (results chain) explicitly
shows linkages between projects and outcomes and models them in a rigorous
manner. The Department also has a guide and template for providers to measure
and evaluate the benefits associated with a project/initiative. However, at this
time no benefits evaluation has been performed.

What are the key components of the EHR systems?
The definition of an electronic health record is that it is a lifetime record of an
individual's key health history and care. However, the definition is not clear as
to what comprise the key components of this record. Should the record consist

[5] The cost benefit of electronic patient referrals in Denmark, *Association of Chartered Certified Accountants*,
http://www.accaglobal.com/pubs/members/publications/sector_booklets/healthcare_sector/benefit_denmark.pdf
[6] In Denmark's Electronic Health Records Program, a Lesson for the U.S., *TIME*,
http://www.time.com/time/health/article/0,8599,1891209,00.html
[7] Can Electronic Medical Record Systems Transform Health Care? Potential Health Benefits, Savings, and Costs *Health Affairs*, Volume 24, Number 5

of all laboratory events, all hospital visits, all doctor visits, all prescriptions, etc? This distinction is important because it is difficult to determine when the project will be completed if the system is constantly changing.

Infoway defined five core components of EHR systems:
1. registries—provider registry and client registry
2. provincial health information exchange and Netcare portal
3. provincial lab information system
4. provincial diagnostic imaging system
5. pharmaceutical information network

The Department includes these five core components as initiatives in the Provincial Health IM/IT Strategic Plan 2008/09–2010/11. However, the Department's strategic plan also includes 16 additional initiatives, such as chronic disease management and patient portal, within the EHR portfolio. It is not clear if all these initiatives are key to efficient and effective EHR systems.

When will the system be finished?

It is not clear when the EHR systems will be completed. Alberta has made good progress in completing the core components of its EHR systems. However, the Department's vision is to add additional functionality that will allow pharmacists to prescribe online, allow users to access their records online, and allow physicians to record all health care events. The Department can show us when each individual project will be finished, but not when the EHR systems will be finished. A common understanding of which components and usage targets comprise the completion of each phase should be clarified.

Will Alberta's EHR systems be compatible with other provincial and territorial systems?

Our audit confirmed that Alberta is working to comply with standards set by Infoway. The intent of the Infoway standards, as described in the Infoway Blueprint, is to ensure EHR systems are being built consistently. However, it is too early to say whether the systems in different jurisdictions will be compatible, as most jurisdictions have not completed their implementation of EHR systems.

AHS has stated that it is their experience that 94% to 98% of the population seeks health care within their home province. Only 2% to 6% would require health care outside their province of residence. It appears the primary focus of each jurisdiction is to ensure compatibility within their jurisdiction. Ensuring compatibility across Canada would appear to be a secondary focus at this stage of development.

Will new legislation improve participation in the EHR systems?
In Alberta, currently, physicians can voluntarily adopt EHR systems. Neither the Minister, nor the Department, at present, has the authority to compel physicians to participate or make health information available in the EHR systems. However, enactment of Bill 52—*Health Information Amendment Act*, 2008, will give the Minister the authority to compel custodians to make health information available in EHR systems. *iHealthBeat* [8](a health industry news publication) reported that 23% of physicians in Canada have adopted electronic health records. This figure is much lower than other countries with EHR systems (see Figure 1).

Percent of Participation by Physicians
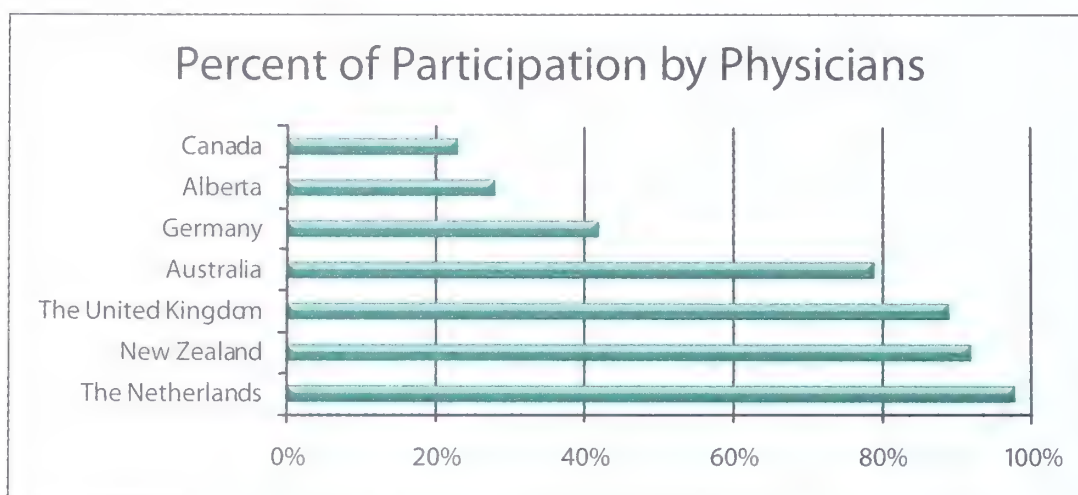
Figure 1: Source *iHealthBeat (Alberta added)*

In 2008, the Department stated that it had implemented an electronic health record system for Albertans. As of the date of this report:
- approximately 40% of physicians in Alberta have EMRs, of which 70% (i.e., 28% overall) have access to EHR systems
- 95% of radiologists have access to EHR systems
- 76% of pharmacists have access to EHR systems
- lab technicians do not have access to EHR systems; however, all lab results are included in the EHR lab repositories

At present, participation by all stakeholders is not mandatory. As a result, patient information in the EHR systems is incomplete.

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[8] "U.S. Lags Behind Other Countries in EHR Adoption, Report Says," *iHealthBeat*,
http://www.ihealthbeat.org/Articles/2008/7/18/US-Lags-Behind-Other-Countries-in-EHR-Adoption-Report-Says.aspx

5. Recommendations

5.1 Oversight and accountability for electronic health records (EHR)

Recommendation No. 6

We recommend that the Department of Health and Wellness and Alberta Health Services, working with the EHR Governance Committee, improve the oversight of electronic health record systems by:

- **maintaining an integrated delivery plan that aligns with the strategic plan**
- **improving systems to regularly report costs, timelines, progress and outcomes**

Background

EHR infrastructure is complex

Managing a complex, interdependent electronic health record infrastructure is a significant challenge. Alberta's EHR systems have been built component by component as they have evolved. They have been built recognizing that the health system is a complex and diffuse operation with many key players and with electronic systems that have evolved over a number of years.

Key component is the strategic plan

A key component of effective oversight is the establishment of a strategic plan for the EHR systems and the alignment of an integrated delivery plan to guide the implementation of the strategic plan, supported by regularly updated detailed plans for each EHR initiative.

An integrated delivery plan should link strategic plan to project plans

An integrated delivery plan should describe how the Department and key stakeholders will implement and achieve the objectives and priorities within its strategic plan through initiatives and projects. This plan should also describe how disbursements will be tracked and how risks and mitigation strategies will be identified and managed to support the strategic plan.

Key elements of oversight also include progress reporting, monitoring toward ensuring the establishment of performance measures and realizing expected outcomes and benefits.

Progress reports are important for monitoring projects

Progress reports tell senior management how the project is progressing, how resources are being used, how much has been spent to date, and whether the project will be completed on time. Progress reports also provide the key information upon which project management can alter direction as required. Progress reporting is needed at the overall initiative level as well as at the individual project level.

Criteria: the standards we used for our audit

The Department should

- have an integrated delivery plan to guide implementation of the strategic plan
- clearly assign responsibility for progress reporting and monitoring

Our audit findings

Integrated delivery plan

No integrated
delivery plan

The Department has a strategic plan that defines the objectives and priorities for EHR systems. Also, each individual project that contributes to an EHR initiative has a detailed project plan. However, the Department does not have a documented plan that connects the objectives and priorities of the strategic plan to the individual projects, or identifies dependencies between initiatives, resources priorities, and risks. The Department relies on undocumented operational processes to get the job done and maintain overall progress. Other information reviewed during the course of the audit did not clearly demonstrate how the Department would mitigate overall EHR risks or allocate resources to key priorities.

Not clear how
projects contribute
to initiatives and
entire EHR
systems

A key component that is currently lacking is a clear outline of how individual projects contribute to an initiative; and how each initiative contributes to the completion of EHR systems. Each EHR initiative must complete a complex body of work to build its piece of EHR systems. Project teams achieve this by breaking the work down into specific projects that are contracted out to third-party vendors. As the work progresses, changes are often required to the contracts to reflect adjustments to the scope of work, time, cost or deliverables. These changes are approved through an established process, but the impact of these changes is difficult to see without an integrated delivery plan.

Progress reporting

No regular
reporting of total
spending on
initiatives

The Department has cost information for each project within an initiative. However, that information is not summarized and shared. The EHR Governance Committee does not receive information on costs or regular financial reporting, and therefore are not in a position to monitor and assess progress. The Department does not have comprehensive EHR systems costing in place—it does not manage and fund all the individual projects and is not in a position to establish an overall perspective on costs. The Department should track costs for all publicly funded initiatives.

Specific reporting on progress, expenditures and impacts is critical to making decisions on the ongoing investments in the EHR.

Progress reporting occurs on high level targets

Progress briefing does occur at a high level on targets of the strategic plan, and only on what the Department has spent to date, and not what others have spent. Although stakeholders regularly receive progress bulletins on individual EHR initiatives, the bulletins do not compare actual with expected performance, and do not describe key decisions made or pending.

Implications and risks if recommendation not implemented

The absence of an integrated delivery plan to guide the implementation of the strategic plan diminishes the Department's ability to achieve its principal objectives, monitor performance and mitigate risks in an efficient and economic manner.

Without coordinated project and delivery plans, there is a risk that not all of the work expected under projects will be delivered, or that the work that is delivered will not meet the business requirements of the Department, or the needs of users of EHR systems.

Without proper progress reporting, management (EHR Governance Committee) cannot exercise effective stewardship.

5.2 Project management

Recommendation No. 7

We recommend the Department of Health and Wellness execute publicly funded electronic health record projects and initiatives in accordance with established project management standards.

Background

Department has an established project management framework

The Department's Project Management Office (PMO) has developed a framework based on best practices to provide a common approach for project planning—including business cases, delivery and evaluation. The framework includes standard templates, checklists and process descriptions designed to ensure consistency and quality across projects.

An initiative contains one or many projects

In the Department's vernacular, an initiative deals with the overall efforts to accomplish a fundamental component of EHR systems such as diagnostic imaging. An initiative can consist of one or many projects. A project consists of all phases in the system development life cycle to deliver capabilities in support of an initiative.

Portion of EHR costs are reimbursed

Agreements between the Department and Infoway include funding schedules and budgets. Funding schedules outline the expenditures that Infoway will reimburse to the Department. The budgets outline the costs the Department

expects to incur in fulfilling their agreement with Infoway. Infoway generally reimburses 75% of allowable expenses. The Department tracks costs incurred outside of the funding agreements with Infoway as part of the Department's annual budgeting process.

Criteria: the standards we used for our audit

The Department should have processes to monitor and manage projects to ensure they are progressing as planned:

- all projects and initiatives are supported by business cases
- budgets are compared to total cost
- projects and initiatives comply with the PMO framework

Our audit findings

Project management framework applied inconsistently

In our review of projects within four main initiatives, we found inconsistencies in project monitoring and management. The PMO designed the framework to be tailored to the requirements of each project; it is a set of tools available for use. We saw aspects of the PMO framework in all projects, but found that the methodology outlined was not applied consistently as projects were executed.

Some of the projects pre-date the establishment of the current framework; we did see greater consistency in more current projects, which demonstrates that the Department has made progress in implementing its project management practices. However, even in current projects, adherence to the framework beyond the bi-weekly status reports was inconsistent. The following summarizes our key findings:

Business cases

The Department has not consistently produced business cases to justify the components of the EHR it has developed.

Incomplete business cases

We tested four initiatives: one had a complete business case, two initiatives were supported by incomplete business cases, and the Department did not complete a business case for the fourth initiative. The complete business case was the *Feasibility Study for Pharmaceutical Information Network* (PIN). PIN was the first initiative of the EHR and the Department considers this the original business case for the EHR. The two incomplete business cases discussed the impacts of proceeding with the projects, but did not identify the expected tangible and intangible benefits, or consider whether the benefits justified the costs to complete the initiative.

Business cases not updated

The Department has not completed regular updates of initiative business cases, despite the fact the EHR initiatives have significantly evolved. One business case, written in 1998, has not been updated or reviewed since 2001. The other two business cases, completed in 2004, have never been updated.

Cost management

No budget for total costs of EHR systems

The Department has budgets for individual projects. The Department does not, however, have a budget for the total costs of the EHR components it has funded. The Department sets program budgets each fiscal year, but these EHR initiatives span several years and sometimes cross multiple program areas. Without overall initiative, budgets the Department cannot determine if the expenditures incurred over the life of the initiative are reasonable. It also does not have a current budget for the total costs for each of the four initiatives we reviewed.

No current forecast of costs to complete EHR

The Department does not have a current forecast of the total costs required to complete the EHR systems it currently has planned for development. Three of the four initiatives we reviewed had an initial budget estimate as part of the original business case, but the Department has not tracked actual costs against these estimates. The initial budget estimates have not been updated, except for one initiative that was updated in 2008 in response to a request by Canada Health Infoway. The Department has not forecast the total costs to complete the components of the EHR it is funding.

The Department does not track total costs of EHR

The Department does not maintain a current schedule of total cumulative costs it has incurred for EHR systems or for each initiative. We asked for the total costs incurred by the Department on EHR as of March 31, 2009. The most current estimate available at the time of our request was the figure provided to the Public Accounts Committee as of March 31, 2008. The Department's updated estimate up to March 31, 2009 is $615 million (we did not audit this estimate). The Department tracks costs incurred that are eligible for reimbursement by Infoway, which represents a portion of the total initiative costs.

Costs of EHR not regularly reported to Executive Committee

We found no evidence that management reported financial information on initiatives to the Department's executive committee regularly. All initiatives use bi-weekly status reports to communicate the current status of projects. Bi-weekly status reports do not include financial information.

Quality management

No quality management plans

The Department could not provide evidence that quality management plans were developed for the three of the four initiatives we examined.

Schedule management

Impact of schedule delays not clear

Status reports often showed schedule delays for extended periods, with no clear explanation of the impact of the delay in completing milestones and deliverables; therefore, the consequence of delays in specific activities or milestones was not clear.

Documentation and records management

Key documents not centrally stored

There were inconsistencies in the level of documentation and records management across the four initiatives:

- For a project conducted in 2003–05, many key documents were unavailable. The Department indicated these had been misplaced due to staff turnover and because Wellnet had originally managed the project.
- We were unable to review a grant agreement for a project completed in early 2008, as the Department was unable to locate the grant file.
- The Department did not follow its delivery approval process in three out of four initiatives. In one case there was little or no support for completed deliverables; in two others, there was documented support for the completed deliverables, but no approval indicating that the deliverables were acceptable.

Risk management

Risk assessments not updated

There were inconsistencies in the implementation of risk management processes across the initiatives we sampled. Initial risk assessments completed as part of funding requests were generally not updated on an ongoing basis and did not appear to be a significant consideration for ongoing project management.

Implications and risks if recommendation not implemented

Without a current business case, there is a risk that the Department cannot define the need for EHR systems and will be unable to measure or assess the value it receives from the project. Inconsistent project management practices means that the Department cannot proactively manage costs, risks and issues; projects may not proceed on time; and projects may fail to meet expectations or support the underlying business needs of the Department, or users of EHR systems.

5.3 Monitoring the EHR

Recommendation No. 8

We recommend the Department of Health and Wellness proactively monitor access to the portal (Netcare), through which the electronic health records can be viewed, reviewing it for potential attacks, breaches and system anomalies.

Background

EHR has systems across the province

EHR systems span data repositories, networks and entry points across the province. Daily transactions update patient records with doctors' notes and observations, allow pharmacists to check for allergic reactions to drugs and attach diagnostic images to a patient's file. These transactions must have a level of security and surveillance that reflects the Government's commitment to keep Albertans' health care information private and secure.

Netcare has 22,216 active users

There are 22,216 active Netcare users who have varying levels of access to EHR systems. Access ranges from the ability to look at only patient demographic information, to view all transcribed reports, diagnostic images, laboratory results and prescribed drugs for patients treated in Alberta.

Masking data is available but not automatic

Data masking is the process the Department uses to prevent health information from being visible in Netcare. This is accomplished by requiring users to provide the reason(s) they need to access the 'masked' information before it is presented to them. The Department does not automatically mask all health information—patients have to submit a request to the Department to have their data masked.

Criteria: the standards we used for our audit

The Department should have processes in place to effectively monitor EHR systems for potential breaches, threats and attacks, and to collate this information into one central location.

Our audit findings

No central monitoring of EHR systems

EHR systems are made up of multiple systems maintained and operated by multiple organizations (Department, AHS, vendors). There is no single organization responsible for monitoring the EHR—each organization is responsible for monitoring its own systems. The Department is, however, responsible for reviewing events logged in Netcare. The logs capture the details about what records users access, who accessed the records and when they were accessed.

Department standards for reviewing logs are unclear

It was unclear what standards the Department was supposed to follow when reviewing the access logs for Netcare. The Department drafted a standard in 2008, with direction from the Data Stewardship Committee, but when we completed this audit it was still pending approval. They also have an audit process, last updated in 2007, which the Department stated they were following. The two documents have similar requirements for reviewing logs, but the 2007 audit process does not include an audit requirement to review frequently failed login attempts, or require that an audit be carried out of the unmasking decisions.

Access was not
reviewed for three
months

Our testing revealed that for three months in 2009, the Department was not
following either the draft standard or the audit process—they did not carry out
any review of user access. The Department has informed us that it was not
reviewing user access because of a problem with the way the logs were being
reported. They advised us that logs were available in the event that an
investigation was necessary.

Access review
process is manual

The Department follows a manual process to review user access. The
Department has provided their analyst with high-level direction on what to look
for when doing a review, but the analyst relies mainly on professional
judgment. Because it is a manual process, the Department is only able to
complete a review of access for a small percentage (less than 1%) of Netcare
users.

Department does
not proactively
review unmasking
decisions

The Department's current practice is to perform an audit of unmasking
decisions only upon receipt of requests from patients. This is contrary to
requirements in the draft audit standard which state that auditing shall be done
monthly. They stated that as no patient had submitted a request for a review, no
audits had been conducted during the past year.

Implications and risks if recommendation not implemented
Without regular proactive and thorough reviews of Netcare logs, the
Department is unlikely to detect unauthorized access. This puts the
confidentiality of patient information at risk.

5.4 User access management
Recommendation
**We recommend that the Department of Health and Wellness ensure that its
user access management policies are followed and that user access to health
information is removed when access privileges are no longer required.**

Background
Good user access management is one of the key components in an effective
information security management system. The main concept behind effective
user access management is to ensure access permissions to Netcare are properly
assigned and authorized, and such permissions are removed when no longer
required, such as, for example, when a Netcare user is terminated by the health
organization.

Strong user access
management
necessary to
maintain privacy

EHR systems contain sensitive and private patient medical information. Strong
user access management limits access to EHR systems and Netcare to only
those users who are required to have access. Well-designed and effective user

access management must be in place to ensure compliance with Alberta's *Health Information Act,*[9] and to protect the privacy of patients.

Criteria: the standards we used for our audit

The Department should have well-designed user access management policies and procedures in place for assigning and terminating user access for EHR systems, and should ensure these policies and procedures are complied with.

Our audit findings

User access management policies not consistently followed

The Department has policies in place to provide Department affiliates (e.g., employees, agents and contractors) with the guidance they need to prevent unauthorized access to, and to maintain the confidentiality, integrity and availability of, health information. However, we found that as policies relating to user access management are not consistently followed, they are ineffective.

User access management practices must cover all stages through the life-cycle of user access—from the initial registration of new users, to the final de-registration of users who no longer need to access patient health information.

Many terminated users still had access

Of the 22,216 active accounts in Netcare, we identified 158 employees, terminated by the three health regions, that still had access to Netcare. We confirmed with stakeholders that these accounts belong to employees who were terminated from the organizations and, at that time, no longer required access.

Easy for terminated employees to "fall through the cracks"

According to AHS, stakeholders are responsible for notifying the Department and AHS of employee departures. The failure to remove Netcare access for terminated employees resulted from stakeholder staff neglecting to inform AHS of employee departures. Given the high numbers of health care staff in the province and the equally high numbers of staff who move between facilities, it is easy for terminated employees to "fall through the cracks" in this largely manual process.

No process to review active accounts

Our audit revealed that the Department did not have well-designed and documented user access management policies and procedures in place to review user access privileges within Netcare. The Department indicated that, with the large number of stakeholders involved, reviewing all Netcare accounts manually is not practical as it would take a significant amount of time to perform.

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[9] RSA 2000, c. H-5: section 60(1) A custodian must take reasonable steps in accordance with the regulations to maintain administrative, technical and physical safeguards that will ... (c) protect against any reasonably anticipated ... ii) unauthorized use, disclosure or modification of the health information or unauthorized access to the health information.

Auto-disable
script has "bug"

The Department realizes that problems in the existing user access management process can result in failure to disable Netcare accounts belonging to terminated staff. To reduce the risk, they implemented a control to automatically disable Netcare user accounts after a period of inactivity. However, if a Netcare account is compromised and is used to log into the systems during that period, it will never be flagged by the auto-disable script and will remain active. Moreover, our analysis found a "bug" in the script that prevented the disabling of certain types of inactive accounts. The Department has acknowledged this issue and has indicated they corrected the "bug."

Implications and risks if recommendation not implemented

Confidentiality of
health information
may be at risk

Without a well-designed and effective user access management process in place for Netcare, the Department cannot ensure that patients' health information within the systems will remain private and secure.

6. Glossary

AHS	Alberta Health Services
AHW	Alberta Health and Wellness—the Department of Health and Wellness and the overall provider of Alberta's electronic health record
CHA	Capital Health Authority—the Edmonton regional health board now part of the Alberta Health Services "super board"
CHI	Canada Health Infoway
CHR	Calgary Health Region—the Calgary regional health board now part of the Alberta Health Services "super board"
EHR	Electronic Health Records—records of key health history and care in electronic form
EMR	An Electronic Medical Record is a computerized legal medical record created in an organization that delivers care, such as a hospital or doctor's office. Electronic medical records are a part of a local stand-alone health information system that allows storage, retrieval and manipulation of records
HIA	*Health Information Act*[10]
Initiatives	A structure of actions and interrelated projects managed in a coordinated way, required to implement strategy and achieve business objectives or outcomes
Integrated Delivery Plan	An integrated delivery plan describes how the Department will implement and achieve the objectives and priorities within its strategic plan
Netcare	Web-based portal that provides access to patients' health information
OIPC	Office of the Information and Privacy Commissioner
pHIE	Provincial Health Information Exchange
PIA	Privacy Impact Assessment

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[10] RSA 2000, c.H-5

Project   A temporary endeavour undertaken to create a unique product, service or result (PMI). A project consists of all phases in the system/application development lifecycle (SDLC) to deliver capabilities in support of an initiative objective or outcome.

Repositories   Systems that contain patient's drug, laboratory, diagnostic imaging and text report information

Stakeholders   Organizations that have a direct or indirect stake in electronic health record systems such as
- Ministry of Health and Wellness
- Alberta Health Services (former RHAs and Health Boards)
- Alberta Medical Association
- Colleges—such as the College of Physicians and Surgeons of Alberta, Alberta College of Pharmacists, etc.
- Alberta Pharmacists' Association
- Pharmacy Chains (such as Shoppers' Drug Mart, Walmart, etc.)
- Office of the Information and Privacy Commissioner
- Primary Care Networks
- Community Providers (MDs, Labs, DI)

Electronic Health Records—Appendix

The following four criteria were used to assess Alberta's electronic health records systems. Criteria 1, 2 and 3 were used by legislative offices that participated in the collaborative audit.

1. Do the Department's plans focus on developing consistent and compatible EHR systems?

Audit Criteria	Met	Not Met
The Department should have the following in place:		
• an established framework for strategic planning		✔
• a current and comprehensive strategic plan for EHR systems	✔	
• project-specific and master funding agreement(s) with Infoway for developing compatible EHR systems	✔	
• a delivery plan to guide implementation of the strategic plan		✔

2. Is the Department managing EHR projects based on a recognized project management methodology and are they achieving expected results?

Audit Criteria	Met	Not Met
The Department should have the following in place:		
• detailed project plans for all projects		✔
• Department approval for all project plans	✔	
• monitoring processes to ensure projects are progressing as planned		✔

3. Does Department management receive the information it needs to make decisions about implementing EHR systems?

Audit Criteria	Met	Not Met
The Department should have the following in place:		
• Management and funding agencies should receive the information necessary to monitor and assess progress, and make decisions related to implementation of an electronic health record.		✔
• The Department should demonstrate the extent to which the objectives and outcomes have been achieved and benefits are realized.		✔
• The Department should report on its progress in achieving its goals to key stakeholders.		✔
• The Department should identify performance indicators to measure progress in achieving its goal(s) and strategies for each project.		✔

4. Can the Department demonstrate that all partners within EHR systems have implemented privacy and security mechanisms?

Audit Criteria	Met	Not Met
The Department should have the following in place:		
• Policies and procedures should be consistent with legislation and the intent of the Infoway security blueprint.	✔	
• The Department has documented and effective control processes for requesting, establishing, issuing, suspending and promptly closing all user account access to EHR systems. The Department ensures that access is limited to what a user needs to do their job. The Department proactively monitors the access.		✔
• The Department has documented and effective change management procedures to assess and implement all requests for changes to the EHR in a structured way. The Department ensures that all change requests are standardized	✔	
• The Department should have processes to ensure that all changes to data in information registries and repositories are authorized, documented and tested. The Department ensures that a back out plan is developed for all significant changes.		✔
• The Department should have processes to ensure that all transmissions are encrypted from end to end and all transmissions are tracked for completion.	✔	
• The Department should have processes to ensure that all transactions follow established health industry standards for the transmission of data between EHR systems.	✔	
• The Department has a documented IT Continuity or Disaster Recovery Plan (DRP) designed to reduce the impact of a major disruption on key business functions and processes. The DRP supports the organization's overall BCP.	✔	

Food Safety—Follow-up

1. Summary

Food safety operates in a complex multi-jurisdictional environment

In 2006, we reported on the Government of Alberta's systems to promote safe food. Our audit examined the systems used by the Departments of Agriculture and Rural Development (Agriculture) and Health and Wellness (Health), plus the nine regional health authorities that are now part of Alberta Health Services (AHS).[1] These entities share responsibility for food safety in Alberta along with the federal government. These entities operate within a complex regulatory environment because, in Canada, government responsibility to promote and enforce food safety is multi-jurisdictional. Federal/provincial/territorial committees develop national food safety policies.

Within Alberta, both federal and provincial regulators exercise their mandates as described in a variety of statutes. For example, the Canadian Food Inspection Agency, a federal entity, regulates most of Alberta's primary beef processing. Amongst the provincial regulators, Agriculture regulates the remaining aspects of primary agricultural production and processing. Health sets legislation and policy under the *Public Health Act*[2] (the *Act*). AHS regulates food processors and retailers (including restaurants) by authority of the *Act*. Within this multi-jurisdictional environment, the entities understand that coordinated effort needs to be an objective.

Follow-up on ten recommendations from *2006 Report*: five repeated, satisfactory progress on three, two implemented

In our *2005–2006 Annual Report* (beginning on page 63), we made ten recommendations to improve these entities' systems. The government committed to implementing all ten recommendations. In the spring of 2009, we followed up to determine their progress in implementing our recommendations. As a result, we now repeat five recommendations. Of the remaining five original recommendations, management has made satisfactory progress on three and fully implemented two. Overall, we conclude that progress has been disappointingly slow given the importance of food safety and the government's commitment to improve its systems.

Slow progress in Health and AHS

Progress has been particularly slow in the Health sector. Food safety is a component of environmental public health which represents a miniscule proportion of spending for Health and AHS. In 2007, Health and AHS began a process to address our recommendations. This promising start lost momentum

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[1] On May 15, 2008, the Alberta Health Services Board replaced the nine regional health authority boards, the Alberta Mental Health Board, Alberta Alcohol and Drug Abuse Commission and Alberta Cancer Board. AHS is now responsible for health service delivery in Alberta.
[2] RSA 2000, c.P-37

after a year. While food safety has not deteriorated in the province over the last three years, the opportunity to improve the system has been delayed.

Satisfactory progress at Agriculture

For Agriculture, food safety is a primary goal. Agriculture has made satisfactory progress on the three recommendations we made specifically to it.

Little progress where coordination required

Some food safety issues require coordinated action. For those issues, regulators believe that strategic elements such as approved policies and clarity of roles and responsibilities would assist in making the required improvements in operations. While Health, Agriculture and AHS have moved forward on some of the required strategies, they have made little progress resolving the food safety issues we identified in our original report. Those include enhancing information systems, coordinating programs, eliminating gaps in regulatory coverage, and improving accountability for results.

Why food safety is important to Albertans

Food-borne outbreaks in Alberta

In our original report, we mentioned that Health had identified 289 enteric outbreaks[3] in 2004; 23 of these were associated with food establishments such as restaurants. In 2008, the equivalent figures were 397 and 17, so a significant risk continues to exist. For some individuals who have fallen ill from food-borne illness, the effects may last a lifetime.

Cost of food-borne illness

Society pays an ongoing economic price for food-borne illnesses. In our *2005–2006 Annual Report*, we reported its costs to the health care system which one study estimated at $2.4 million annually per 100,000 population. On top of health care costs, lost productivity costs an estimated $8 million annually per 100,000 population in Canada.[4] Food-borne outbreaks affect the food industry in two ways. First, contaminated food must be recalled and destroyed. Second, food safety issues in Alberta could affect agricultural exports and industry development.

Regular inspections expected

Albertans expect that facilities where food is prepared are regularly inspected and any deficiencies corrected. In particular, regulators should identify and correct known or suspected food safety risks promptly. Transparency and accountability in the food safety system are important so that legislators and citizens have information about food safety and can make informed decisions.

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[3] Enteric means "occurring in the intestines" (Canadian Oxford Dictionary). Not all enteric diseases are food-borne; the majority are related to norovirus which is not typically food-borne. While public health personnel investigate all Alberta outbreaks, not all outbreaks are traced to a source.

[4] The Journal of Food Protection, *"The Burden and Cost of Gastrointestinal Illness in a Canadian Community"*

What we found in this follow-up audit

Repeated recommendations

Inspection frequency doesn't meet targets and vary significantly

We again recommend that AHS follow generally accepted and consistent inspection processes across the province. AHS has made progress on building a foundation for improved practices. For example, it now classifies risks and sets frequency targets on the same basis across Alberta. However, inspection frequency has improved only marginally. In 2008, AHS completed 64% of its routine inspections across the province as compared to 56% in 2004. Inspection frequencies and enforcement actions vary significantly between the regions. Inspection documentation is still inconsistent between health regions. Often inspectors do not follow up critical violations at food establishments. See section 4.1 for details.

Coordination can improve

We previously made three recommendations that applied jointly to Health, Agriculture and AHS. All three are repeated here. First, we again recommend that the three entities, in cooperation with federal regulators, improve food safety planning and cooperation in Alberta. The departments have made progress in defining their food safety policies and aligning them with federal food safety policies. However, coordination of operations can improve. The major mechanism for coordination in 2006 was the Canada–Alberta Partners in Food Safety (CAPiFS). The partners are refocusing the work of CAPiFS and now have the opportunity to effectively share and coordinate information on food safety in Alberta. See section 4.8 for details.

Gaps in coverage still exist

Second, we again recommend that gaps in food safety coverage be eliminated. The gaps in regulatory coverage that we reported in 2006 continue to exist today. For example, many mobile butchers' premises do not meet acceptable standards of food handling and overall cleanliness. A small percentage of meat facilities do not meet *Alberta's Meat Facility Standard* yet continue to operate despite histories of non-compliance. Regulators are just beginning to inventory the facilities in Alberta that are not registered federally. Food facilities in these categories may not be routinely inspected and may therefore be a higher food safety risk. See section 4.9 for details.

Integrated accountability unchanged

Third, we again recommend that Health and Agriculture develop performance measures and integrate their accountability for food safety. The two departments should be able to demonstrate that their food safety system protects Albertans. Health and Agriculture have started to address the issue by drafting policy statements. However, central monitoring and reporting of results is basically unchanged from 2006. See section 4.10 for details.

No change in
Health's food
safety information
systems

We again recommend that AHS, supported by Health, improve its food safety information systems. The nine former health regions still use the same information systems that we audited in 2006. Issues of data access and security have not been addressed. Health has not defined standard data elements or measures and does not collect any more food safety or environmental health data than it did in 2006. A common and consistent information system will support our earlier recommendation about accountability. See section 4.3 for details.

Recommendations with satisfactory progress

Results of
restaurant
inspections now
available

AHS and Health have made satisfactory progress implementing a wider range of enforcement and promotion tools. In particular, AHS has made restaurant inspections publicly available through the regions' websites as of July 2008. To fully implement this recommendation, the entities need to continue their roll-out of innovative solutions such as disclosing inspection results for all food establishments, not just restaurants. See section 4.2 for details.

New system to
manage
surveillance
projects

Agriculture has made satisfactory progress in improving the management of its surveillance projects. Agriculture has designed and implemented a new system to plan, select and manage its surveillance program. Agriculture still needs to involve stakeholders in setting priorities and planning its surveillance projects. Agriculture should also improve cost tracking for its projects. See section 4.5 for details.

Agriculture's
information
systems have
improved

Agriculture has made satisfactory progress improving its food safety information systems. It has improved access and security controls for its smaller applications and corrected data consistency and completeness issues we identified in 2006. The Department's food safety information systems could still capture more types of data and Agriculture should classify and protect all data types based on risk and sensitivity. See section 4.7 for details.

2. Audit objectives and scope
2.1 Our audit objectives

Our objective was to determine if Agriculture, Health and AHS have implemented the ten food safety recommendations from our *2005–2006 Annual Report*. We assessed whether management's actions to address our recommendations were adequate against the same audit criteria we used in 2006.

2.2 Our scope

In performing this follow-up audit we:

What we did

- visited five of the nine health regions and surveyed the remaining four
- accompanied a meat inspector at a slaughter facility and public health inspectors on 21 food establishment inspections
- reviewed 110 food establishment inspection files at AHS health regions and 102 inspection files covering meat and dairy producers at Agriculture's Regulatory Service Division
- examined 16 project files in Agriculture's surveillance project management system
- interviewed management and staff from all three entities

We do not have the authority to audit the federal entities[5] that regulate aspects of food safety in Alberta, nor did we contact these entities during our follow-up audit. When we quote annual statistics, they relate to the 2008 calendar year unless otherwise indicated.

3. Background

Overview of food safety in original *Report*

Our *2005–2006 Annual Report* gave an overview of food safety in Alberta. Readers can review this material online.[6] The overview begins on page 66 of volume 1 of our *2005–2006 Annual Report* and discusses:

- the importance of food safety
- the regulators of food safety in Alberta, including the Canadian Food Inspection Agency (CFIA) and the provincial food safety regulators
- mechanisms to coordinate food safety initiatives internationally, nationally and provincially

Health organizational changes

To follow up our 2006 recommendations, we dealt with the Environmental Public Health Team at Health. Since our *2005–2006 Annual Report*, the department moved this team into the Surveillance and Environmental Health group within the Public Health Division (formerly the Population Health Division).

Few changes in program delivery at AHS

While AHS began in 2008, environmental public health programs continue to be delivered under the same nine-region format that existed in 2006. Until the end of our field audit work in June 2009, there were still nine directors running nine programs across the province. The number of public health inspectors working on food safety, about 110, has remained constant since our last audit.

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[5] The federal entities include Health Canada, its First Nation and Inuit Health Branch, and the Canadian Food Inspection Agency (CFIA).
[6] http://www.oag.ab.ca/files/oag/ar2005-06volume1.pdf

Food Safety Working Group addressed 2006 recommendations

To address our food safety recommendations, Health and the nine health regions formed the Food Safety Working Group. The Group summarized its own recommendations in a report titled *A Unified Response to the Recommendations made by the Office of the Auditor General of Alberta Respecting Food Safety in Alberta (2005–2006) and to the Issue of Public Disclosure from the Food Safety Working Group*. The Food Safety Working Group made 11 recommendations that have not been formally approved by its member organizations. Health and AHS follow its guidance to advance their food safety initiatives.

Agriculture organizational changes

In 2006, Agriculture reorganized to bring all inspection and investigation services under the Regulatory Services Division. Otherwise, Agriculture's organization remains as described in our earlier report.

Food safety continuum, "from farm to fork"

The food safety continuum refers to the processes that ensure safe food for consumers; "from farm to fork" is one saying that summarizes the continuum. Primary production takes place on a farm, ranch or feedlot, raising animals or growing a crop. Primary processing takes a raw product and begins to process it; for instance, beef are slaughtered or vegetables are cleaned and graded. Secondary processing further refines the product, perhaps to turn it into ready-to-eat or frozen items that are marketed in stores. Tertiary processing takes place just before a consumer eats it; restaurants are most numerous in this category, but there are other food preparation environments such as supportive living homes, school lunch rooms and work camps. There are also support processes in the continuum such as the transportation and storage of food. Each process along the continuum poses food safety issues.

Multi-jurisdictional regulation

The goal of food safety regulation is to identify risky scenarios and mitigate those risks. In Canada, food safety regulation is multi-jurisdictional. For example, the Canadian Food Inspection Agency regulates most of Alberta's primary beef processing, because most of Alberta's beef goes to national and international purchasers. Federal regulators also have responsibility for primary and secondary production whose products exit Alberta's borders.

Alberta's jurisdictional regulation

Alberta Agriculture promotes food safety in primary production through its Alberta HACCP Advantage and surveillance programs. Agriculture also has regulatory jurisdiction when the product stays in the province. This applies to milk, eggs and some animal slaughter. AHS's public health inspectors regulate most of Alberta's tertiary processing. There is an equivalent inspection role on First Nations' reserves by federal public health inspectors within Health Canada.

4. Our audit findings

4.1 Food establishment inspection programs—recommendation repeated

We are repeating portions of this recommendation first made as Key Recommendation No. 6 in our *2005–2006 Annual Report* (vol. 1—page 76). While AHS management has implemented solutions to some elements of our original recommendation, the following critical actions still need to be addressed.

Recommendation No. 9—repeated

We again recommend that Alberta Health Services improve their food establishment inspection programs. Specifically, AHS should:

- **inspect food establishments following generally accepted inspection frequency standards**
- **ensure that inspections are consistently administered and documented**
- **follow up critical violations promptly to ensure that food establishments have corrected those violations**

Background

Risk classes and inspection requirements

Public health practitioners rely on food establishment inspections to protect human health. Routine inspections occur at frequency levels as described in the *Blue Book*.[7] The *Blue Book* calls for an annual stratification of food establishments into three risk categories or classes.

Risk classes are based on the amount of handling and preparation food undergoes before it is consumed. Risk class 1 establishments sell prepackaged, ready-to-eat food and therefore have the lowest risk. Risk class 2 establishments (for example, many fast food outlets) have some food preparation but do not use raw products. Full service restaurants in which raw food is stored and prepared fresh are risk class 3. Seasonal operations such as summer camps and booths at special events require at least one inspection per open period. Additional inspections occur to ensure correction of violations, investigate food-borne illnesses and outbreaks, investigate complaints, or act on a food recall.

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[7] The environmental health directors in the health regions developed the booklet titled *A Common Reference System and Operational Standards for Alberta Regional Health Authority Environmental Health Programs—October 2001*, commonly called the *Blue Book*. The *Blue Book* defines vision, mission, scope, principles and values for environmental health programs. It then breaks environmental health into seven functional program areas, one of which is food safety. Every health region uses the seven functional program areas from the *Blue Book* to organize its work.

Criteria: the standards we used for our audit

The systems that support program delivery should be well designed, controlled, and operated. Standards for program delivery should be defined. Each entity should have adequate manpower, including training and continuing professional education.

Food safety programs should be consistent across the province (not necessarily the same, but of equivalent effectiveness). Throughout the province, those being regulated should receive equivalent treatment. Managers should monitor operational results on a timely basis. The extent and timeliness of program delivery should be maintained. Appropriate actions should be taken at each entity, based on program results.

Our audit findings

Risk assessment

Inspections follow common standards

At the time of our field work, AHS had almost completed the conversion of all regions' food establishment classification systems into the three risk categories outlined in the *Blue Book*. The conversion should be completed in 2009.

The Food Safety Working Group developed the "Food Establishment Hazard Assessment Worksheet," a tool for classifying an establishment's risk class. Six of the nine health regions are using the worksheet. The other three are using similar risk assessment tools.

We conclude that AHS uses a common risk assessment standard. Management has implemented this portion of the original recommendation.

Inspection frequency

Frequency has improved but does not meet standards

All health regions have adopted the *Blue Book* guidelines: class 3 facilities require an inspection every 4 months, class 2 every 6 months and class 1 annually. The following table shows each region's routine inspection load. In 2008, inspection completion rates at the nine health regions ranged from 39% to 100%. The overall provincial completion rate for 2008 was 64% compared to 56% in 2004. Frequency statistics have improved in eight regions and three regions meet the standard. However, for the province as a whole, approximately one-third of routine inspections are not taking place.

Food establishment inspection totals by Regional Health Authority[8]

Regional Health Authority	2008			2004
	Expected routine inspections	Actual routine inspections	% completed	% completed
Calgary	18,027	6,984	39	43
Aspen	3,772	1,678	45	39
David Thompson	3,898	2,163	56	43
Peace	2,813	2,001	71	41
Chinook	2,784	2,149	77	42
Northern Lights	838	721	86	65
East Central	1,615	1,588	98	30
Palliser	1,201	1,184	99	63
Capital	11,223	11,280	100 +	97
Provincial Totals	**46,171**	**29,748**	**64% (avg.)**	**56% (avg.)**

Shortage of inspectors

Management has indicated a shortage of inspectors continues to be the explanation for why inspection frequency guidelines are not met. To meet these guidelines, AHS estimates it would need to spend roughly $4.5 million more per year for additional inspectors and related supervisory and support staff.

Consistent inspection and documentation

Food establishment inspection requires professional judgment. It is not surprising that different public health inspectors use different inspection techniques. However, the inspection system as a whole needs to establish standards to ensure that essential issues are covered, assessed consistently and documented.

Documentation of inspections vary

AHS, through the Food Safety Working Group, has begun to establish these standards. The group's "Common Set of Inspection Elements for Uniform Reporting," identifies both critical and non-critical elements to be covered during an inspection. However, each health region still uses its own checklist. These checklists vary by region; some contain as few as 21 elements, others as many as 34. The approach to filling out these checklists also differs. Some inspectors use the exception approach, reporting only those items not in compliance. Those using computers generally follow a completion approach, checking off items as they are covered.

Critical violation checklists vary

The Food Safety Working Group also developed a "Critical Violation Compliance" checklist which sets out critical violations under the food regulations. Again, inspectors continue to use a variety of checklists in the field. The number of defined critical violations varies from 13 to 18 in the checklists

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[8] This data is reported per calendar year and is unaudited. A routine inspection is a formal and complete inspection to determine compliance with *Blue Book* and professional standards.

now in use. Because a common set of inspection elements and critical violations has not been incorporated by all regions, it is difficult to determine if similar violations receive the same treatment across the province.

Critical violations

Many scheduled re-inspections not done

The immediate correction of critical violations is a key preventative control. The Food Safety Working Group identified standard response times and re-inspection timeframes (in working days) for critical violations. However, when we tested inspection reports from 110 establishments, we found 31 cases where re-inspections were scheduled but never done.

Use of enforcement powers

Increased prosecutions and executive orders

Public health inspectors have regulatory authority under the *Public Health Act* to enforce their findings.[9] In our *2005–2006 Annual Report*, we noted that inspectors seemed reluctant to move up the enforcement ladder. In 2008, we observe this has changed. There has been an increase in the number of prosecutions and executive orders.

Food safety prosecutions and orders by Regional Health Authority[10]

Regional Health Authority	Prosecutions		Executive orders
	2008	2004	2008
Calgary	7	3	166
Aspen	2	1	31
David Thompson	1	-	14
Peace	0	-	14
Chinook	0	-	5
Northern Lights	0	-	11
East Central	0	-	3
Palliser	0	-	4
Capital	17	-	106
Provincial Totals	**27**	**4**	**354**

Consistent practices across province required

We conclude that AHS has made satisfactory progress in implementing this part of our original recommendation. AHS must now ensure consistent enforcement action across the province. For example, in 2008 Aspen prosecuted two food establishments and wrote executive orders on 31. For the same period, neither Chinook nor Palliser (which are at least as large as the Aspen region) prosecuted any cases and both wrote five or fewer orders.

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[9] The *Public Health Act*, RSA 2000, c.P-37, gives public health inspectors (as executive officers under the *Act*) the power to issue executive orders to facilities that pose a food safety risk. Executive orders can impose a broad range of requirements on the operator, from requiring immediate rectification of an issue to amending permits and even to closing a facility.

[10] This data is reported per calendar year and is unaudited. All prosecutions in both 2004 and 2008 resulted in guilty verdicts.

Conflict of interest

Conflict of interest
standard met

Alberta Health Services has a conflict of interest bylaw that all staff must adhere to. Most health regions manage the bylaw through their human resource processes. Three health regions went a step further by requiring disclosure by inspectors regarding their memberships and relationships with organizations they could inspect.

Management has implemented this part of our original recommendation.

What remains to be done

Alberta Health Services will finish implementing this recommendation when:

- food establishments are inspected within province-wide frequency standards
- inspections are carried out and documented on a consistent basis
- critical violations are followed up in a required timeframe to ensure identified violations have been corrected
- enforcement actions are consistently administered across the province

Implications and risks if recommendation not implemented

If regulators do not implement consistent inspection practices across the province, levels of food safety inspection may vary. Lower standards of inspection can lead to adverse human health impacts. When inspections fall behind frequency targets, public health risk may increase.

Without consistent documentation, management will not have the information they need to analyze the effectiveness of their programs.

Without timely action on known food safety issues, food safety regulators accept an increased risk to Albertans' health. Without timely and effective follow-up, food establishments with chronic poor food safety practices will continue to operate and expose Albertans to the risk of food-borne illness.

4.2 Tools to promote and enforce food safety—satisfactory progress

Background

Innovative tools
were
recommended

In our *2005–2006 Annual Report* (vol. 1—page 83), we recommended that AHS and Health consider a wider range of tools to promote and enforce food safety.

We noted that Alberta's regulators should consider innovative approaches to improve food safety. Many jurisdictions outside Alberta had implemented innovations and reported on their effectiveness.

Criteria: the standards we used for our audit

The regulators should have the legislative, regulatory and promotional tools needed to exercise their food safety mandate. Practices should be consistent across the food safety continuum.

Our audit findings

Restaurant
inspections
disclosed

Effective July 1, 2008, the Minister of Health and Wellness directed all health regions to disclose the results of restaurant inspections on their websites. All regions complied. Other food establishment inspections, such as those of grocery stores or meat facilities, are not disclosed. As well, the disclosure by health region varies; some include the entire inspection report while others disclose critical violations only.

HACCP training
and concepts have
been introduced

Hazard Analysis Critical Control Point (HACCP) is an internationally recognized, science-based preventative approach to food safety. HACCP can be implemented in food establishments by the operators to enhance food safety. Some jurisdictions have mandated HACCP (or less arduous processes based on HACCP principles) to oblige operators to increase their food safety activities. Since our original audit, HACCP concepts have been introduced in the province's training course for food handlers. As well, HACCP training has been provided to public health inspectors.

Other tools
identified

The Food Safety Working Group identified further innovative approaches to food handler education, certification and on-the-job training, as well as enhanced food testing techniques. AHS and Health have not decided which of these approaches will be implemented.

What remains to be done

Alberta Health Services and Health will fully implement this recommendation when they complete their process to assess and implement innovative solutions to food safety issues such as those identified by the Food Safety Working Group.

Implications and risks if recommendation not implemented

Without exploring innovative initiatives, regulators may not have the best support and sanctions to improve operator performance. Without innovative practices, borderline food safety practices by operators may not be eliminated.

4.3 Food safety information systems—recommendation repeated

We have repeated this recommendation, first made as Key Recommendation No. 7 in our *2005–2006 Annual Report* (vol. 1—page 84).

Recommendation No. 10—repeated

We again recommend that Alberta Health Services, supported by the Department of Health and Wellness, improve their automated food safety information systems. This includes:

- **enhancing system management, security, and access control**
- **ensuring data consistency**
- **ensuring that service level agreements are in place**
- **developing reporting capacity for management and, accountability purposes**

Background

Three systems used at health regions

The health regions use three different software packages to collect and store environmental health information (including food safety information): TMS, Caseworks and Hedgehog. All three packages support food safety activities such as issuing permits, calculating risk for each establishment, recording inspections, scheduling re-inspections and reporting summary results. There is no common software package for the province as a whole. Health does not access the systems that AHS currently uses, does not collect regional environmental health data and does not have a system to store it.

Criteria: the standards we used for our audit

Information systems should be well designed, controlled and operated. Managers should define the information they need to plan, manage and report on their key businesses; the information systems should collect that data. Systems should be secure, including access, input and processing controls. Systems should collect and maintain timely, complete and accurate data. Management should periodically review to ensure data quality. Data should be accessible to those who need it. Information systems should be efficient and reliable.

Our audit findings

No changes in security and access since 2006

AHS has not changed the food safety information systems at the health regions. Whatever was in place in 2006 still operates in the same way today. The system management, security, access control and service level agreement issues raised in 2006 are repeated.

AHS and Health need separate systems

The Food Safety Working Group recommended a single environmental health information management system for the province. Initially, the entities considered whether one system would serve both AHS and Health. They

decided that AHS and Health would each require its own system. This reinforces the need for coordinated effort to ensure both entities secure the data they need to plan, manage and satisfy accountability expectations.

Information system planning at Health

Health has prepared its own "go forward plan" which outlines strategies to improve the quality and timeliness of environmental health information. Food safety is an important component of this plan. It requires Health to develop outcome indicators, performance measures and data elements for its new system. The plan has not yet established timelines for developing and implementing the system.

Health to define information requirements

In the interim, Health does not want to impede AHS's information system development, and plans to define provisional requirements for environmental health data sets and indicators in summer 2009. The objective is for Health to determine what information is required. AHS will provide that information, no matter what system it decides to implement. At present AHS has no formal plan or timeline for its system development.

Implications and risks if recommendation not implemented
Without adequate security for their computerized information systems, health regions run the risk of lost or corrupt data. This can have an impact on managing the business and supporting regulatory decisions. Without strong service level agreements in place, health regions may face an unexpected service disruption due to issues with the software vendor.

Without a defined data set for the province, efforts to collect consistent data will be undermined. Without discussing data needs with other potential data users, those users will not be able to access the data that would improve their analysis of food safety and public health issues.

4.4 Compliance with permitting legislation—implemented
Background

Permits required to operate

In order to operate, a food establishment requires a valid permit. The Minister of Health sets the fees. The health regions issue the annual permit and collect the fees. Permits will not be issued unless fees are collected.

In our *2005–2006 Annual Report* (No. 8—vol. 1, page 87), we recommended that AHS ensure their food establishment permitting practices comply with legislation and are efficient.

Our audit findings

Permits now current

All health regions have streamlined their permitting processes. They have established payment dates and processes that allow establishments to comply with regulations. In particular, establishments get their permits before the permit year begins.

4.5 Agriculture's surveillance program—satisfactory progress

Background

Agriculture's surveillance programs needed to improve

In our *2005–2006 Annual Report* (No. 9—vol. 1, page 88), we recommended that the Department of Agriculture and Rural Development improve the administration of its food safety surveillance[11] programs. This included:

- documenting its prioritization processes
- involving partners in the prioritization of projects
- ensuring conditions for the approval of specific projects are met and final approval recorded
- capturing costs for large projects
- monitoring the impact of surveillance projects
- considering whether regulatory support for the program is required

Criteria: the standards we used in our audit

The Food Safety Division (FSD) should ensure its process to select, implement and monitor surveillance projects is appropriate. There should be effective coordination between food safety partners to ensure initiatives are properly prioritized. Surveillance programs should be operated effectively and efficiently. Managers should monitor results and take appropriate actions, based on program results.

Our audit findings

New system implemented

Agriculture has developed and is implementing a new system designed "to plan, select and manage [surveillance] work, and realize results that provide the greatest benefit."[12] The system's design satisfies the issues we raised in our original audit. Some elements of the new system are still being implemented. This is why three of six sub-recommendations are still in progress.

Prioritization processes

Prioritization focuses on food safety issues

In its new system, Agriculture prioritized seven food safety topics.[13] Each topic has a specialist issue team. Each team develops specific food safety issues within its topic. For example, BSE (mad cow disease) in cattle is an issue

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[11] Surveillance refers to the collection, analysis and interpretation of food safety information.
[12] Taken from an internal PowerPoint presentation created by FSD entitled *Results Chains: Integration of a value management concept in FSD* (undated).
[13] The seven high-level food safety topics are: transmissible spongiform encephalopathies (TSEs); parasites; chemical containment; bacteria; viruses; antimicrobial resistance; and syndromes.

within the TSE topic. At the time of our audit, Agriculture had identified 58 issues. Agriculture prioritizes these issues by considering scientific, social and political criteria following a systematic process.

Issues have desired outcomes

For the most critical issues, Agriculture creates a "results chain." Using flowcharting techniques, a results chain defines the desired outcomes for that issue. For example, "decreased contamination in a finished product" may be a desired outcome. The chain then defines and links projects, initiatives and barriers that may contribute to or threaten the achievement of the desired outcomes. At the time of our audit, Agriculture had completed 28 results chains and is completing more based on its prioritization of the issues.

The prioritization process has been standardized and documented. This implements our first sub-recommendation.

Involving partners

Partner involvement not formalized

Agriculture has not yet formally involved partners or stakeholders in the development and prioritization of food safety issues. Using a results chain approach, Agriculture identifies the actions necessary for government, industry and stakeholders to achieve an identified outcome. Within the new system, Agriculture seeks partners when a potential surveillance project needs an industry partner. The opportunity to engage partners and stakeholders earlier should be considered and formalized. Therefore, this sub-recommendation is still in progress.

Approval process

Project approval process well designed

From the original audit, we recommended that conditions of approval be met and final approval be recorded. Proposed projects are reviewed and endorsed by a project team, a project sponsor, the appropriate food safety issue team, and approved by FSD's Senior Leadership Team[14]. FSD records and stores its surveillance prioritization decisions and related documents on the computerized Project Reports Database. FSD has successfully implemented this sub-recommendation.

Costing

Tracking costs is better; plans in place to further improve

As in the original audit, capturing cost information can improve. FSD now has a staff member specifically tracking and reporting costs. However, in-kind costs (those related to internal departmental resources like laboratory services or staff time) are not always complete because Agriculture lacks systems to capture them. For example, currently a surveillance team member's time would be captured only if a portion of their salary had been budgeted to the particular

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[14] The Senior Leadership Team is comprised of members from the three Food Safety Division branches and their Director.

project and then allocated to project costs for the year. This typically only happens for senior employees' time. Capturing staff time will improve as the Department is planning a system to record staff time by project code. As a result, we conclude the Department is making satisfactory progress on this sub-recommendation.

Monitoring impact of surveillance projects

Project information is available and results are shared

To influence food safety positively, the knowledge gathered through surveillance projects needs to find its way into practice. As we reported in 2006, projects usually end with a publication. FSD rightly considers publication a criterion for determining the impact of a project. For its recent projects, FSD also reports how project participants themselves have implemented surveillance recommendations. For example, before FSD's "boot bath" project[15] began, three of eight partners used boot baths in their facilities; after the project, seven implemented boot baths. FSD should extend this type of analysis to determine the impact of its surveillance projects. We conclude that Agriculture has made satisfactory progress with this sub-recommendation.

Considering need for regulatory support

Regulatory change sought if required

Within the new system, FSD considers the need for regulatory support in the context of a particular results chain. If a project, activity, or barrier requires regulatory support in order to promote positive food safety outcomes, regulatory support will be sought. This satisfies our last sub-recommendation.

What remains to be done

Agriculture should:

- involve stakeholders and partners in its surveillance issue identification and prioritization processes
- implement systems to capture in-kind costs for specific surveillance projects—Department-wide systems may provide the solution to some of these cost-capture requirements
- extend its analysis of surveillance project results to determine whether its projects ultimately contribute to food safety outcomes

Implications and risks if recommendation not implemented

Food safety partners and stakeholders can add a practical, commercial enterprise point of view to the identification and prioritization of food safety issues. Industry involvement at the prioritization level may help identify potential project partners. Without cost information, management is missing a component in the cost-benefit analysis of its projects. Without understanding

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[15] The project's objective was to determine if disinfecting boot baths placed outside slaughter kill floors in abattoirs assist in reducing the microorganism count on the footwear of plant personnel upon entering and exiting. The study determined they do; the bacterial reduction was statistically significant.

whether their projects have made an impact in practice, FSD will not be able to assess their program's effectiveness.

4.6 Agriculture's inspection and investigation programs—implemented

Background

In our *2005–2006 Annual Report* (No. 10—vol. 1, page 91), we recommended that the Department of Agriculture and Rural Development improve its inspection and investigation programs by ensuring:

- it considers a broader range of enforcement tools
- inspections are up to date
- practices for complaints, incident reports and held tags[16] are consistent

Our audit findings

Enforcement tools

Non-compliance principles developed

The Regulatory Services Division (RSD) analyzed the need for further legislative authority. It concluded that further penalties were not required. RSD also developed a "compliance principles" document to guide inspector and investigator responses to non-compliance. Inspectors and investigators now use these principles to guide their actions.

Up-to-date inspections

Dairy inspections up-to-date

In 2006, inspectors attended all slaughter dates as the regulations dictate, but other routine inspections covering bulk milk graders, transport vehicles and dairy farms were behind schedule. These routine inspections are now up to date. For example, dairies are inspected every two years unless non-compliance is observed, in which case inspection frequency increases until issues are addressed.

Complaints, incident reports and held tags

Standardized process developed

RSD has standardized its management of complaints, incident reports and held tags. For example, all complaints are treated as incidents whose disposition is recorded on Agridam.[17] As well, held tags are now tracked at the facilities where the tags are issued.

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[16] Under Alberta's *Meat Inspection Act and Meat Inspection Regulation* 42/2003, inspectors can hold a carcass (or part of it) to prevent its further processing. The inspector does so by affixing a tag with the words "Alberta held" to the carcass. Only an inspector can affix or remove held tags. Typically the inspector holds a carcass while awaiting lab results to confirm that it is fit for human consumption. Inspectors can also use held tags to prevent use of "any equipment, surface or room [that] does not meet the requirements of the legislation" (paragraph 39(1) of the *Regulation*).

[17] Agridam is Regulatory Services Division's food safety application that is used to track information related to meat inspections, investigations and licensing.

Supervisory review enhanced

In 2008, RSD added an internal inspection process whereby regional managers directly review an inspection by their red meat inspectors. The supervisor's review reinforces consistency in processes such as daily checklists, held tags, and ante- and post-mortem inspection procedures.

4.7 Agriculture's food safety information systems—satisfactory progress

Background

In our *2005–2006 Annual Report* (vol. 1—page 94), we recommended that the Department improve its food safety information systems. This included:

- improving security and access controls
- ensuring complete, timely and consistent data collection
- ensuring data gets converted onto the computerized database

Access controls and data collection could improve

We suggested ways that food safety information systems could gather further key data and improve data use. We found staff using inadequate passwords and sharing sign-on IDs, thereby compromising information systems' security. Data collection was hampered by inconsistent numbering conventions for surveillance projects. We also expressed concern over the transfer of information from ANHSURS[18] and other data sources to the new AIMS[19] computer system.

Criteria: the standards we used for our audit

Information systems should be well designed, controlled and operated. Managers should define the information they need to plan, manage and report their key businesses; the information systems should collect that data. Systems should be secure, including access, input and processing controls. Systems should collect timely, complete and accurate data. Data should be accessible to those who need it. Information systems should be efficient and reliable.

Our audit findings

System development a slow process

Information systems in RSD and FSD are small; most run on outdated software platforms such as Lotus Notes. Each division supports its own systems and support resources are limited. As a result, systems development is a slow process.

Security and access controls

Access controls have improved

Access control for the Agridam and AIMS systems significantly improved. Staff now must go through the Department's central sign-on system to get to these applications. Central sign-on enforces minimum standards for passwords. Agriculture eliminated the sharing of sign-ons.

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[18] ANHSURS refers to Animal Health Surveillance System. This system records raw data (e.g., laboratory findings or field tests) from surveillance and other projects.

[19] AIMS refers to Agri-Food Information Management System. It is the replacement system for ANHSURS.

Sensitive or confidential data not restricted

In terms of access security, anyone with access to the Projects Reports Database can view all project data. The Database is not classified according to sensitive or confidential data.

Data collection

More information could be recorded in Agridam

Our concern with Agridam was that more types of data could be collected, and that data could be analyzed to enhance inspection and investigation programs. Agriculture decided to use its resources to build a tracking functionality into Agridam, so work on our recommendation has not advanced.

Project numbering corrected

FSD has corrected the numbering of its surveillance projects by assigning unique numbers on the Project Reports Database. FSD can now prepare a complete inventory of projects. It has also assigned a staff member to ensure updates to the Database are entered on a timely basis.

Data conversion

BSE data transferred to new database; no organized archiving of other data

FSD populated the new AIMS database with only the data from historical BSE projects. This was done to save time and money on the change to the new system. The data related to all other projects remains in whatever form it was in 2006. For example, hard copy materials have not been archived in an organized manner. Documentation resides with the originating lab or scientist and if required will have to be tracked down through that source.

What remains to be done

Agridam should capture more data and its search functionality can improve. Data captured on the Project Reports Database should be evaluated for risk, and access to sensitive data should be restricted. Data from earlier surveillance projects (with the exception of BSE projects) should be identified and access should be assured.

Implications and risks if recommendation not implemented

Without key data and the capacity to interrogate that data, Agridam will not perform to its full potential. Without adequate access control, sensitive data may be available to unauthorized parties. Results of completed surveillance projects could be lost if not catalogued and protected. This is important because some of that data could provide a baseline for future projects.

4.8 Integrated food safety planning and activities—recommendation repeated

We first made numbered recommendation 11 in our *2005–2006 Annual Report* (vol. 1—page 97). That recommendation contained six sub-recommendations. We have repeated two of six sub-recommendations.

Recommendation No. 11—repeated

We again recommend that the Departments of Health and Wellness and Agriculture and Rural Development, in cooperation with Alberta Health Services and federal regulators, improve planning and coordination of food safety activities and initiatives. This includes:

- **improving day-to-day coordination of provincial food safety activities**
- **improving cooperation and working relationships among provincial and federal partners such as the First Nations and Inuit Health Branch and the Canadian Food Inspection Agency**

In addition to the two sub-recommendations being repeated, recommendation 11 included four other sub-recommendations. We recommended that the Departments of Health and Wellness and Agriculture and Rural Development, in cooperation with Alberta Health Services and federal regulators:

- define their own food safety policies, objectives and measures
- coordinate provincial food safety policies and planning so initiatives are integrated
- ensure provincial approaches align with initiatives being developed through federal–provincial–territorial committees
- encourage the joint application of HACCP and HACCP-related programs in Alberta

We conclude that management has made satisfactory progress on these four sub-recommendations.

Background

Coordinating mechanisms among the many participants

In our *2005–2006 Annual Report*, we outlined the mechanisms to coordinate food safety regulators' activities in Canada and in Alberta. We also noted the challenges those mechanisms faced.

- At the national level, a variety of federal–provincial–territorial (FPT) committees brought together participants with food safety interests. At that time, FPT committees overlapped on several issues and progress toward a national food safety strategy was slow.
- Within Alberta, neither ministry had completed a food safety strategy. Health's efforts to create a "public health strategic plan" had lost momentum. Agriculture had adopted a food safety goal and had developed aspects of a strategic plan for food safety. At the time, progress on

Agriculture's strategic plan was slow and neither project was integrated with the other's provincial strategic initiatives.

- On an operational level, the federal and provincial regulators in Alberta needed to coordinate activities on issues of common interest. The formal mechanism was CAPiFS.[20] We reported that CAPiFS needed to renew its terms of reference because new members had joined the original group of Health Canada, Agriculture and Health.
- The nine health regions relied on DC9[21] to coordinate food safety initiatives. However, DC9 did not have a formal mandate and was having difficulty completing specific tasks.

Criteria: the standards we used for our audit

In a multi-jurisdictional environment of shared responsibility such as food safety, there should be integration and coordination. Alberta's ministries, departments and agencies' policies and programs should be coordinated province-wide. The foundation for food safety programs should be consistent across the province.

Our audit findings
Repeated sub-recommendations

Coordination mechanism needs to be redesigned

The formal coordination of food safety activities in the province needs to be redesigned. On a positive note, initiatives such as the FPT Food Safety Committee, the work of CAPiFS in developing a draft Alberta Food Safety Strategy and the two departments' work on their strategic plans have kept communication amongst participants open over the past three years. And informally there is contact and cooperation between Agriculture, Health, and AHS on specific outbreaks and food safety issues as they arise.

CAPiFS

However, Agriculture and Health want to improve operational coordination by refocusing the work of CAPiFS. The partners feel they can realize greater value for money than in the past, but have not defined a new structure or mandate for the entity. Since 2007, CAPiFS has not had a full-time coordinator; an Agriculture manager now chairs the group. Because of workload and priorities related to the development of national and provincial food safety strategies and to the consolidation at Alberta Health Services, CAPiFS has not held some of its normally scheduled monthly meetings and not resolved many of the food safety issues it could address.[22] Aligning CAPiFS to deliver on an Alberta Food Safety Strategy would result in identification and management of food safety

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[20] Canada Alberta Partners in Food Safety is a joint undertaking of Health Canada, the Canadian Food Inspection Agency, Health, Agriculture and AHS. The first four entities provided CAPiFS' financing and resources.
[21] DC9 is a group formed by the environmental health directors from each of the nine health regions. Although the nine regions are now united, DC9 continued to meet throughout our follow-up audit.
[22] See section 4.9 for examples of issues that CAPiFS could address.

risks and improvements in the coordination and coverage of food safety directives across the province. Refocusing CAPiFS could also provide an opportunity to increase the participation of federal partners such as the First Nations and Inuit Health Branch of Health Canada.

An example of how coordination could improve

The 2008 review of the mobile butchers' facilities illustrates how coordination can improve. We'll discuss the content of that review in the next recommendation, but here we talk about process. The review was led by Agriculture who hired a consultant to review the status of mobile butchers in Alberta. The consultant invited both Agriculture and AHS staff to the facility visits. The consultant completed the review and submitted his report to Agriculture. Many of the facilities presented food safety risks. At that time, AHS still regulated these facilities. Agriculture shared the final report with Health but neither Agriculture nor Health passed it along to AHS. As well, no further action was taken by the regulators to correct the known food safety risks. A coordinated response would have seen the risks promptly mitigated.

Sub-recommendations with satisfactory progress

Policies have been reviewed

Since our *2005–2006 Annual Report,* there has been identifiable progress in developing food safety policies and strategies. We outline some of the important initiatives and what remains to be done.

Draft *Environmental Public Health Strategic Plan*

Health led a cross-ministry initiative to create a draft *Environmental Public Health Strategic Plan.* Food safety is one component of environmental public health. The *Plan* is written so that all ministries with responsibilities in the environmental public health field can follow a common vision, mission and goals, then implement in a coordinated fashion. AHS, Agriculture and other departments participated in the development of the *Plan.* The *Plan* was completed in December 2008, but has not yet been approved.

Draft *Alberta Food Safety Strategy*

Agriculture initiated and CAPiFS completed a draft *Alberta Food Safety Strategy* in April 2008. The *Alberta Food Safety Strategy* awaits approval of the national strategy for safe food. Again, the *Strategy* had cross-ministry input. It proposes initiatives in four areas:
- greater standardization and controls (including enhanced governance and accountability)
- optimizing resources (e.g., IT, financial and knowledge management)
- improved operations
- effective change management

FPT committee work

In our *2005–2006 Annual Report,* we discussed the FPT committees with overlapping interests in food safety. Since then, participants have reduced the number of FPT committees; now most FPT food safety deliberation flows

through the Food Safety Committee. The committee consists of 39 members from across Canada and is co-chaired by a senior Agriculture staff member. Health is also represented on the committee. Alberta's own safe food strategy was developed in parallel with the FPT committee's national strategy, so Alberta's initiatives align with the national strategy.

Alberta HACCP Advantage program

In 2006, Agriculture introduced the Alberta HACCP Advantage (AHA) program. This is a federally funded program administered by Agriculture. By the end of March 2009, 253 processors have used AHA grants, advice and audit services to implement HACCP in their operations.

HACCP training provided to health inspectors and food handlers

The restaurant sector has not been as quick to integrate HACCP into their operations as food processers have been. There's not the same trade-based imperative for restaurants, nor do smaller restaurants have the resources to implement full-blown HACCP. However, as a starting point, HACCP training has been rolled out to public health inspectors and food handlers.

What remains to be done

The Alberta ministries' two strategic documents, the *Environmental Public Health Strategic Plan* and the *Alberta Food Safety Strategy*, represent a strategic foundation for food safety. The FPT *National Strategy for Safe Food* is closely aligned to Alberta's documents. The plans need to be approved and their coordinated initiatives need to be implemented. Whether and how HACCP or HACCP-related programs will be used by secondary and tertiary food processors in Alberta needs to be resolved.

Implications and risks if recommendation not implemented

Without integrated strategies for food safety in Alberta, individual programs may not be as coordinated, effective or efficient as they could be. If regulators do not resolve jurisdictional and information sharing issues, food establishments in Alberta may not be routinely and fully inspected.

4.9 Eliminating gaps in food safety inspection coverage—recommendation repeated

We have repeated this recommendation, first made as an unnumbered recommendation in our *2005–2006 Annual Report* (vol. 1—page 102). We reported gaps in coverage of food establishments because those establishments did not fit clearly within the mandate of one regulator or another. This is where lack of clarity in roles and responsibilities allows higher risk facilities to operate.

Recommendation No. 12—repeated

We again recommend that Alberta Health Services and the Departments of Health and Wellness and Agriculture and Rural Development, working with federal regulators, eliminate the existing gaps in food safety coverage in Alberta. Gaps include:

- **mobile butchers**
- **consistently administering the *Meat Facility Standard***
- **coordinating inspections in the "non-federally registered" sector**

Background

Mobile butchers

A mobile butcher slaughters animals on the animal owner's premises. The meat is for the owner's use and cannot be sold. The mobile butcher eviscerates, skins and halves the animals on site. In many cases, the mobile butcher then takes the halves back to his own facility for further processing. Agriculture licenses the mobile butcher, but historically the health regions licensed the mobiler's processing facility.

Meat Facility Standard was a joint effort

Collaboration between the Ministries of Agriculture and Health produced the *Meat Facility Standard*. The *Standard* outlines the requirements that must be met by meat processing plants. Historically, public health inspectors inspected all provincially regulated meat facilities. Starting in 2000, Agriculture's meat inspectors began to enforce the *Standard* at meat facilities attached to provincially regulated slaughter facilities.

Two types of CFIA inspections

Broadly speaking, the Canadian Food Inspection Agency (CFIA) conducts two types of inspections. First, it registers and inspects facilities that qualify under its federal meat, eggs or other legislation. These are federally registered facilities and the CFIA's inspections are comprehensive. Second, the CFIA has narrower inspection responsibilities under other federal legislation. For example, the CFIA may inspect food establishments specifically for labeling or export certification purposes. These are not full inspections, nor are all the facilities inspected under these programs federally registered.

Criteria: the standards we used for our audit

Agriculture, Health and AHS, together with other food safety regulators, should identify overlaps and/or gaps in the food safety continuum. Higher risk food establishments that operate in the void left by overlaps or gaps should be identified and corrected promptly and effectively.

Our audit findings
Mobile butchers

No action taken
on facilities
identified in 2006

When we reported in 2006, meat inspectors with Agriculture had identified
20 mobile butchers' facilities with food safety issues. Agriculture had passed
that information along to Health. Coordination stalled at that point as the public
health inspectors in the health regions were never alerted to these problem
facilities. As far as we can determine, no further regulatory actions were taken
with these 20 facilities.

Review done by
Agriculture on 56
facilities

To address this situation, Agriculture and Health planned to transfer regulatory
jurisdiction for the facilities from AHS to Agriculture. In preparation for this
switch, Agriculture had a consultant conduct "an onsite baseline food safety
assessment of each of these freestanding meat-processing facilities"[23] in spring
2008. For these reviews, the consultant invited both AHS and Agriculture staff
to attend. The consultant reviewed all 56 known mobile butchers' facilities and
found:

- 24 of 56 facilities did not demonstrate a standard of overall acceptable
  cleanliness
- 30 of 56 facilities employed workers that did not follow proper personal
  hygiene and food handling practices
- 10 of 56 facilities produced either fermented or dry cure sausages—there
  were no process control records in place for these products. Fermented and
  dry cure sausages are considered high-risk products

Issues at mobile
butcher facilities
not corrected

Jurisdiction over mobile butchers changed in April 2009. At the time of our
follow-up field audit work, mobile butchers were operating as they had when
we reported in 2006. As of June 2009, Agriculture has started inspecting the
mobile butchers' permanent shops as well as their trucks. Agriculture intends to
use the findings of the spring 2008 review as the basis for a new initiative to
inform and educate mobile butchers.

Meat Facility Standards

Increased
inspection of meat
facilities

Agriculture's Regulatory Service Division (RSD) developed a new inspection
worksheet for meat inspectors that covers 22 points from the *Meat Facility
Standards*. Now inspectors examine facility documentation and aspects of
facility maintenance along with their regular inspection of animals. Agriculture
also introduced the Red Meat Facility Audit in 2008. Every red meat facility is
audited three times a year; two are "partial" audits and one is "full." The
Facility Audit procedures test compliance with all elements of the *Meat Facility
Standard.* Facilities receive a score from the audit and results are shared with

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[23] Alberta Agriculture's Regulatory Services Division's internal document, *Mobile Butcher Jurisdictional Change
Deployment Project – Third Party Food Safety Assessments*, p. 1.

the facility operator. On average across the province, scores for meat facilities have risen from 54% to 75%, indicating improved food safety practices.

Problems still exist

However, our audit testing indicates that a small number of facilities continue to operate despite long histories of poor compliance with the *Meat Facility Standard*. For example, in the Edmonton region we looked at the history of five facilities with poor inspection results. Problems like poor records management, facility disrepair, and inappropriate staff activities compounded to give these facilities low scores. While this is the first year of the audit process, these problems are not new to these operators. One facility happened to be a file sample from our 2006 audit; the serious issues recorded in 2006 continue today. Agriculture has not moved up the compliance ladder with this and other facilities despite ongoing food safety risks.

Meat facility inspections by AHS are infrequent

We discussed earlier the issue with the frequency of AHS's food establishment inspections. To compound this issue, AHS does not inspect meat facilities as frequently as restaurants. It may be years between inspections of AHS-regulated meat facilities.

Non-federally registered

Inventory of non-federally registered facilities has begun

As we reported in 2006, the federal and provincial participants need to inventory the non-federally registered facilities. The natural choice of coordinating group is CAPiFS because it includes representatives from Health Canada, the Canadian Food Inspection Agency, Agriculture, Health and AHS. Meeting minutes show that CAPiFS began to compile the inventory in January 2009. CAPiFS is still months away from completing the inventory; actual inspection and regulation of facilities are still in the future.

Implications and risks if recommendation not implemented

Without timely action on known food safety issues, food safety regulators accept an increased risk to Albertans' health. If regulators do not resolve jurisdictional and information sharing issues, food establishments may not be routinely and fully inspected. Poor food safety practices in these establishments may not be detected.

4.10 Accountability—recommendation repeated

We have repeated this recommendation, first made as Key Recommendation No. 12 in our *2005–2006 Annual Report* (vol. 1—page 105). The actual reporting available to the Legislature and people of Alberta has not materially improved since we reported our results in October 2006.

Recommendation No. 13—repeated
We again recommend that the Departments of Health and Wellness and Agriculture and Rural Development improve reporting on food safety in Alberta.

Background

Joint
accountability

In our *2005–2006 Annual Report*, we discussed the issue of joint accountability in an environment of shared responsibility for the food safety continuum. There was no system where joint accountability could be worked out.

Health had little
information in
2006

Food safety is a component of the environmental health divisions at Health and AHS. In 2006, Health had little coordinated information about environmental health planning, performance or outcomes. Health did not have systems to collect consistent, relevant data that could be used to report to legislators and the public. Interested parties could not determine the effectiveness of environmental health initiatives.

Agriculture had
performance
measures and
strategies

The situation at Agriculture was different because food safety is a Ministry goal. Agriculture included strategies and performance measures for its food safety goal. We noted that Agriculture's performance measurement around surveillance projects and HACCP could improve.

Criteria: the standards we used for our audit

The Ministers of Health and Agriculture should be able to demonstrate accountability for the integrated food safety program in Alberta. In addition, individual entities should also be accountable for their specific food safety mandate. Each entity should contribute to integrated accountability by reporting on its operations (e.g., cost and outputs) and effectiveness (meeting objectives). Reporting should include quantifiable performance measurement where possible. The entities should use the accountability process to enhance program design and delivery.

Our audit findings

Cross-ministry
work has begun

Health and Agriculture have made some progress in laying the foundation for food safety accountability. We have described how the Ministries coordinate strategic work through CAPiFS and have worked to develop both a *National Strategy for Safe Food* and an *Alberta Food Safety Strategy*. The *Alberta Food Safety Strategy*, subtitled *Building the Integrated Food Safety Strategy*, identifies ten prioritized strategic initiatives for the province. Amongst the ten initiatives, accountability is the fourth highest-ranked and addresses two related issues. First, roles and responsibilities need to be clarified as we discussed in sections 4.8 and 4.9. Second, participants should demonstrate the effectiveness of the food safety system.

But no approval or implementation

As participants have neither approved nor implemented the *Alberta Food Safety Strategy*, integrated cross-ministry accountability for food safety has not yet progressed.

No change in reporting at Health

The *Environmental Public Health Strategic Plan's* fourth recommendation deals with the development of indicators and outcomes, while the fifth promotes "the need for an annual environmental public health report." As food safety is an important part of environmental health, Health will be able to demonstrate accountability once participants implement the *Strategic Plan*. At present, information systems, central monitoring of results, and public reporting are unchanged since 2006. We conclude that accountability for food safety has not improved at Health.

Accountability systems exist at Agriculture

In its annual reports, Agriculture provides extensive information about its food safety goal. The *2007–2008 Report* discloses the cost of its food safety activities and describes how Agriculture addressed its seven related strategies. Agriculture's food safety performance measures are evolving. It now has two performance measures, one related to red meat facilities and another about industry adoption of HACCP. Agriculture's reporting is the most comprehensive of the material now available about food safety in Alberta.

Implications and risks if recommendation not implemented

Without a system to coordinate accountability for food safety, the Ministries will not be able to demonstrate the effectiveness of their actions in an environment of shared responsibilities. Individual participants also need systems to demonstrate the effectiveness of their own food safety activities.

Commercial Vehicle Safety

1. Summary

What we examined

A Government of Alberta goal is "Alberta will be a safe place to live, work and raise families."[1] The Alberta Transportation 2008–2011 business plan supports this with a goal that "Alberta has the safest and most efficient road and rail systems in Canada."

Transportation does roadside inspections of commercial vehicles

Commercial vehicles play a vital role in Alberta's economy. By monitoring and enforcing safety standards for Alberta's 120,000 commercial vehicles registered for our roads, the Department of Transportation promotes road safety while acknowledging the commercial nature of the industry. Our audit objective was to examine and evaluate the systems used by the Department to monitor and enforce commercial vehicle safety programs through its roadside inspection program.

Why it is important to Albertans

High cost of collisions

Increasing volumes of vehicles and collisions continue to be a source of concern to industry, regulators, and the general public. Commercial vehicle collisions result in substantial direct and indirect costs. The Department estimates that for 2008, the cost of reported collisions involving at least one commercially registered truck[2] was over $1.7 billion. The cost of a fatal collision could reach $15 million; typical injury collisions averaged about $120,000 and property damage collisions averaged $8,000. In 2007, there were 107 fatal collisions in Alberta involving at least one commercially registered truck. In 2008, there were 91.[3]

What we found

Well designed systems to conduct roadside inspections

The Department has well-designed systems to monitor and enforce commercial vehicle mechanical safety issues. All commercial vehicles are inspected annually by a certified inspector, and about 18,000 of them are more stringently re-examined at roadside or at weigh-scales during a year. Further, the Department employs continuous quality improvement principles by re-examining aspects of their various programs, such as Safety Fitness Certificates and progressive discipline sanctions. Also, in 2008 the Department undertook an extensive project to examine the causes of Out-of-Service (OOS) vehicles. An OOS vehicle is one that an inspector has deemed unfit to continue

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[1] Budget 2008, *The Right Plan for Today and Tomorrow,* Government of Alberta Strategic Business Plan
[2] Vehicle weight over 4,500 kilograms
[3] Alberta Transportation Truck and Truck-Tractor Collision Reports—2008

without the correction of an identified issue. The OOS project developed seven themes[4] and made recommendations for strategies to address its findings.

However, during our audit, we found opportunities for improvement:

Opportunities to improve system

- In addition to annual inspections, the Department inspects approximately 15% of commercial vehicles and drivers and collects some information on all carriers.[5] Although this volume may be statistically appropriate, the Department doesn't have a process to identify the trucks and drivers it has not inspected, or a process to identify the high-risk ones that it should.
- Inspection information processing is not timely, and relevant information is not always available at roadside to assist in subsequent inspections.
- Carriers can operate with identified safety issues indefinitely without significant enforcement action.

Majority of collisions due to driver behavior not mechanical condition

- Over 85% of commercial vehicle collisions with an identified cause have been identified as resulting from driver behaviour, rather than mechanical failure. Professional driver and safety training is available, but not mandatory for a licence to operate a commercial vehicle.

What needs to be done

The Department has demonstrated that they are examining their processes and identifying potential changes to their systems. We make three recommendations to support these efforts. We recommend that the Department:

Need to strengthen processes and use data better

- develop risk-based methods for selecting vehicles for inspection and improve the quality of information available to inspectors at roadside
- strengthen enforcement
- use data better to develop strategies and performance measures

2. Audit objectives, scope and approach

Our objective was to examine and evaluate the systems used by the Department of Transportation to monitor and enforce commercial vehicle safety programs. We examined how legislation and safety requirements are communicated, how inspection results are collected and recorded, how results are analyzed to affect operations, enforcement activities and how the monitoring and enforcement systems are measured. We examined activities undertaken by the Department in 2007 and 2008.

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[4] Themes are: understanding and awareness, data collection, branch coordination, inconsistent application of policy, inter-jurisdictional coordination, use of technology and human resources
[5] A "carrier" is a company operating a single or a fleet of commercial vehicles.

3. Overview

The Department's activities include regulating commercial vehicles that operate in Alberta and enforcing safety standards. During the 2008–2009 fiscal year, the Department spent over $11.3 million on programs to enforce commercial truck safety.[6] There are two types of commercial trucks subject to enforcement:

- weighing over 4,500 kilograms and travel out-of or pass through Alberta
- weighing over 11,794 kilograms and operate exclusively in Alberta

The Department is developing a new model to estimate direct and indirect social costs of collisions for Alberta. Preliminary estimates of this model for 2008 collisions involving at least one commercially registered truck totaled over $1.7 billion. The cost of a fatal collision could be $15 million; injury collisions may exceed $120,000 and property damage collisions averaged $8,000. Effective programs to reduce the incidence and magnitude of trucking collisions may have significant economic and social benefits.

Legislative Requirements

Joint federal/ provincial responsibilities

The Department monitors commercial vehicles pursuant to Alberta's *Traffic Safety Act*.[7] The Government of Canada is responsible for monitoring federal carriers[8] licenced in Alberta and delegates this responsibility to Alberta pursuant to the *Motor Vehicle Transport Act*[9] (*MVTA Canada*). The *MVTA Canada* requires provinces to enforce the *National Safety Code* (*NSC*) for federal carriers. Alberta entered into an agreement with Transport Canada in 2005 to implement the *National Safety Code* for federal carriers and report annually on its progress.

The *NSC* requires commercial vehicles to have a Safety Fitness Certificate. Alberta regulates carriers that travel within the province as well as federal carriers. Alberta issues two types of Safety Fitness Certificates:

Federal carriers operate throughout Canada

- Federal operating status—for vehicles that operate throughout Canada and internationally and weigh more than 4,500 kilograms. These vehicles are the size of a large pick-up truck such as those often used by welders and other trades people in the oil and gas industry.

Provincial carriers operate in Alberta

- Provincial operating status—for vehicles that operate only in Alberta and weigh more than 11,794 kilograms. These vehicles are single load vehicles such as gravel trucks and large trucks that pull trailers and have multiple axles.

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[6] We exclude buses from this audit and these figures as they are monitored under a different set of regulations.

[7] R.S.A. 2000, c.T-6; Alberta inspects both provincial and federal carriers.

[8] A federal carrier operates inter-provincially and internationally.

[9] R.S.C. 1985, c. 29 (3rd Supp.)

The Alberta *Commercial Vehicle Safety Regulation*[10] came into effect July 1, 2009. The Alberta regulations were updated to ensure they are consistent with current Canadian and North American standards. The new regulations are the result of a multi-year review of commercial vehicle safety and equipment regulations. This review involved extensive consultation with commercial vehicle stakeholders including industry, municipal and safety organizations. The Department uses bulletins, its website and communications through industry partners to inform carriers of changes to the *Regulation*.

Annual vehicle inspections and permits

Yearly safety inspection for all commercial vehicles

All commercial vehicles must be inspected annually by a certified inspector. We audited this annual process in 2004. The results of that audit are in our *2003–2004 Annual Report* at pages 301 to 307. Carriers can also apply for one of 18 permits allowing them to work outside of standard operating constraints, such as extended driver's hours of service, livestock feed relief exemption, oil and gas well service vehicles or cargo insurance exemption. We did not audit the permit application and granting process.

Safety Fitness Certificates

Carriers must certify they are safe

A Safety Fitness Certificate (SFC) is needed to register a commercial vehicle that requires inspection. This includes both Alberta-only vehicles weighing over 11,794 kilograms and federally operated vehicles over 4,500 kilograms. The applicant must confirm that they possess comprehensive knowledge of safety laws in their jurisdiction, have a written safety and maintenance plan, have designated person(s) to manage the plans and are insured.

Upon registration, the applicant receives a 60-day temporary certificate. During that period they receive a package outlining the *NSC* requirements and are required to submit documentation demonstrating that they comply.

Successful applicants receive a Satisfactory–Unaudited Safety Fitness Certificate. The status of this certificate can change over time depending on the results of subsequent inspections. An unsatisfactory inspection result can lead to a carrier being required to stop operating.

New carriers often lack understanding of safety issues

The Department found that under the current SFC application process new carriers demonstrated a lack of understanding of regulations at roadside and often failed audits. The Department is developing a strategy to strengthen the application process. Any upcoming changes that may occur to this process do not form part of this audit.

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[10] Alta. Reg. 121/2009

Roadside inspections

Roadside
inspections in
addition to annual
safety checks

In addition to annual vehicle inspections, the Department's Commercial Vehicle Enforcement Branch (Enforcement) is responsible for on-road vehicle inspections in the province. The Department operates 19 fixed and a variable number of mobile roadside inspection units. Enforcement's role is to attempt to modify industry behaviour through the use of progressive sanctions.

Inspectors use the Commercial Vehicle Safety Alliance (CVSA) criteria to inspect both federally and provincially licenced commercial vehicles, and their drivers. The CVSA is a not-for-profit organization that establishes the commercial vehicle enforcement criteria used by all government inspection programs within North America.[11] There are seven levels of CVSA inspection. Levels 1 and 2 are the most comprehensive, and assess both the vehicle and driver against multiple criteria. The remaining levels focus on either the vehicle or the driver, are specific to dangerous goods, a jurisdictional concern or are focused in support of a study. Transport Canada requires all provinces and territories to share the results of CVSA inspections for federal carriers with the province in which the vehicle is registered.

A CVSA inspection has three potential outcomes:
- pass
- requires attention
- out-of-service (OOS)

Failed inspections
may result in
vehicle taken
out-of-service

Requiring attention means an issue is to be corrected at the conclusion of the current trip while OOS means correction is needed before the vehicle and/or driver continues.
- if a vehicle is placed OOS, an out-of-service sticker is applied to the vehicle
- proof of repairs must be reported to a peace officer before a vehicle placed OOS can be operated
- peace officers will not release vehicles from an OOS order until all required repairs have been satisfactorily completed
- if, at the discretion of the officer, it is less hazardous to the public to relocate the vehicle, it shall be towed, transported, or escorted to the nearest safe location
- vehicles or drivers placed OOS will be issued a ticket(s) for defect(s) at the discretion of the peace officer

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[11] *Executive Committee Position Responsibilities* Revised February 14, 2007, 1996–2007 Commercial Vehicle Safety Alliance

Traffic Violation Reports may be issued

Another tool available to inspectors is a Traffic Violation Report (TVR) to report issues found which are not covered by the CVSA inspection. Both types of inspection forms are forwarded to the central office in Red Deer, Alberta where they are batched and sent to a service provider for data entry into the Department's Motor Transport Information System.

Inspectors are trained peace officers

All inspectors are peace officers and can issue violation tickets. Officers are trained in a seven-day "Hours of Service" course, then a two-week CVSA course. The first week of CVSA covers drivers licensing requirements and hours of service; the second week is a theory and practical mechanical portion. On the job training consists of being partnered with a senior inspector for thirty-two Level 1 inspections—their last two inspections are supervised by a certified CVSA instructor before the trainee is advanced. The Department requires officers to complete at least 120 Level 1 inspections annually. The CVSA standard requires only 32. Inspections are recorded from the vehicle at roadside and in weigh-stations.

Carrier profiles and risk factor analysis

A carrier profile reports a carrier's history of convictions, inspections and collisions using information provided by inspectors, law enforcement and other government agencies. The profiles are accessible to the carriers and are used by the Department branches. The most detailed version of the profile has ten sections and provides comprehensive information allowing the reader to pinpoint the types of issues a carrier's operation is encountering.

Carriers are assigned a Risk Factor

Every carrier profile assigns a Risk Factor (R-Factor). The R-Factor is a statistically generated value that incorporates a carrier's fleet size, convictions, collisions and CVSA results. For example, if the profile indicates that the R-Factor for that carrier is made up of 33% collisions, 33% inspection issues and 33% convictions then the carrier has to work on all three areas of their operation. If on the other hand the factors are 75%, 15% and 10%, the carrier is given a clear signal to focus on reducing collisions. Carriers can download their profile through a secure website. For large fleet operators it is very valuable as it provides all incident details, allowing them to identify issues with equipment, drivers and practices.

"On-monitoring" status and progressive sanctions

Department identifies worst 5% of carriers

National Safety Code standards require the Department to take corrective action with the worst 5% of all carriers in the province. The Department uses the R-Factor to identify this group. Once identified, the carrier is placed "on-monitoring."

Consequences of
non-compliance

For carriers placed "on-monitoring," the Department's computer system automatically sends the carrier a package that includes their profile and information on compliance in Alberta. The cover letter informs the carrier that "being at any monitoring stage is not acceptable…. Failure to address non-compliance issues within a reasonable time will result in the Department taking any actions it considers necessary including requiring an audit be conducted and submitted; downgrading rating; non-support of safety permits and licences; assigning conditions to complete; attending a hearing with a review committee; issuing an administrative penalty."

Sanctions under
review

Currently the progressive sanctions procedures are under review and potential changes may make better use of administrative penalties and withdrawal of permits. The proposed changes take a carrier's ability to comply into consideration, but with less tolerance for systemic non-compliance.

Commercial Vehicle Enforcement Plan

The *Commercial Vehicle Enforcement Plan* focuses on four key initiatives:
- enhanced enforcement efforts
- communication, education, public awareness and public relations
- improved data quality
- improved communication-collaboration with partners

The *Plan* was developed with input from senior management from the Department's seven regions. Members of the planning team identified several barriers to ongoing operations, including having sufficient time and human resources, the quantity of commercial vehicles on the roads, data collection requirements and maintaining consistent behaviour and documentation between regions. The planning objectives and processes were developed with these challenges in mind.

Project looked
at why
out-of-service
rates were where
they are—made
recommendations

In December 2008, the Department released "Commercial Vehicle Out-of-Service Rate Analysis Project" (OOS Project). This year-long project examined why out-of-service rates exceed 35% of vehicles inspected roadside. The report identifies the following key issues:
- understanding and awareness
- data collection
- branch coordination
- inconsistent application of policy
- inter-jurisdictional coordination
- use of technology and human resources

The report makes recommendations and surveys 13 other jurisdictions in Canada and the United States.

At July 31, 2009, ten OOS Project recommendations have been assigned to leadership teams for implementation. The balance has been distributed to the appropriate branches for evaluation and planning for implementation. The OOS Project focuses specifically on ways to decrease out-of-service rates. The OOS Project and our audit reached similar conclusions in many respects.

4. Findings and recommendations

4.1 Inspection tools and vehicle selection

Recommendation

We recommend that the Department of Transportation improve its inspection capability by incorporating risk analysis into the selection of vehicles for roadside inspection and increasing the amount of information available at roadside.

Background

Commercial vehicles must stop and report

All commercial vehicles over 4,500 kilograms are required to stop and report if passing a weigh scale. If a vehicle is empty it still must come into the scale but can pass by the inspection window in the outside lane and not be weighed. Typically, one or two officers monitor traffic from the station with a separate team conducting inspections. On average a Level 1 inspection takes 30 to 40 minutes with between six and eight inspections typically conducted during an eight hour shift. Evening shifts employ one or two staff that either monitor the scales or conduct inspections.

At June 30, 2009 there were 22,443 carriers in Alberta, operating about 120,000 vehicles in total. 1,500 of these carriers are "on-monitoring" of which 712 or 47% are one truck carriers.

Thermal imaging units help look for mechanical faults

The Department has thermal imaging units at weigh scales situated at Balzac, Leduc and Grand Prairie. The units take thermal images of trucks as they approach the weigh scale. If the unit identifies a vehicle that has unusually hot brakes, exhaust or other component, the vehicle will be detained and inspected. Thermal imaging units are moved around the province periodically for regional initiatives.

Some information on vehicles available at roadside

Inspectors have computer access to some information about the vehicle they are examining through a computer application called the VIS Dashboard. It displays data about a particular vehicle from three databases, such as:

- registration and vehicle identification number
- permit information if applicable
- carrier safety rating if available

- date of last CVSA inspection and high-level result of Pass, Requires Attention or OOS
- expiry date of the annual inspection

Inspectors are also mobile and stop vehicles in random locations

Mobile inspection takes a different approach. The officer will sit at roadside and visually inspect trucks as they drive by. Officers may look at the annual inspection sticker whose shape will indicate when the last annual inspection was done, signs indicating what the truck is carrying, assess if it is full or empty, if the load is secure and generally use professional judgment whether the vehicle should be inspected.

When an officer inspects a vehicle using this process, both CVSA and the Traffic Violation Reports are filled out by hand and retained for submission to the Red Deer central office for processing. After explaining the results of the inspection, the driver is presented with a copy.

Insurance or registration violations can result in a regulatory shutdown for a carrier. The registration system is accessible roadside to facilitate this part of the inspection.

While inspectors have some information on the vehicle via the VIS Dashboard, it is not detailed enough to tell them what issues may have existed the last time it was inspected.

Data entry processes could improve

Other than one field on the VIS Dashboard, there is no electronic submission or entry capability of inspection details at roadside. The process of entering inspections results into the computer system follows days afterward and is done by personnel not present at the inspection. Some interpretation of results may be required.

Criteria: the standards we used for our audit
Monitoring should influence operational decisions, including but not limited to choosing inspection locations, inspection times, and focusing on trends brought forward through analysis of the data they collect. Inspection results should be recorded in an accessible manner, appropriately distributed and monitored on a timely basis.

Our audit findings

No analysis on which carriers have not been inspected

Currently the Department conducts no analysis to identify carriers or vehicles that have not had a roadside inspection. The carrier profile captures inspection information, the absence of which when calculating the R-Factor would indicate that no inspection has been done for that carrier.

We reviewed 96 inspection documents and related computer records from 2008. All were from either Level 1 or 2 inspections from routine activities. We also analyzed data of all inspection records for the calendar year 2007.[12]

We found:

Roadside inspections are resulting in deficiencies being corrected

- 121,414 registered commercial vehicles
- 17,755 or about 15% had been inspected roadside
- 3,822 of the 17,755 had been inspected more than once
- 73% were comprehensive Level 1 or 2 inspections
- 48% of inspections identified one or more defect
- 85% of the vehicles inspected more than once were able to correct issues between inspections, suggesting that the inspection process is effective

Results of inspections are paper-based

We attended inspections at the Leduc, Alberta weigh station and on mobile patrol. At Leduc we observed Level 1 inspections; on patrol, we observed an inspector complete Level 3 inspections consisting of a full document check, including driver's log review, and a visual examination of the vehicle. During our observation, the patrol assessed no need for Level 1 inspections though patrol vehicles are properly equipped to do so if the inspector chooses. In all cases, inspectors filled out paper forms after their examinations of vehicles. Inspectors do not have access to an inspection history of the vehicle, driver/carrier profiles.

Roadside inspection data may take several weeks to reach computer system

We found that it can take up to eight weeks for inspection information to be entered into the Department's database. This delay can occur for several reasons. The inspector may have issued a "requires attention" ticket and retained the inspection report until the carrier returned documentation indicating that they had addressed the problem. Delays may occur in transporting the documents from the field to Red Deer and then to the entry clerks in Edmonton. Volume can also affect entry times by collecting reports over time for batch entries.

New software tested, but no consensus for stakeholders on success

In 2006, Alberta, in collaboration with the Government of Canada and Manitoba Public Insurance, conducted a pilot test of software designed to track inspection results and deliver them to the roadside in real time. We were told that the pilot was successful from the Department's perspective, but didn't satisfy the needs of all of the testing partners. We understand that the Department is planning to develop a system like the one piloted and that the VIS dashboard may have potential to deliver similar benefits to the roadside, but needs to incorporate more detail for both input and output.

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[12] Data provided by the Information Management Branch. We limit our analysis to complete records and exclude any records missing plate or VIN.

Implications and risks if recommendation not implemented

Without ongoing analysis of the entire population of commercial vehicles being inspected, the Department cannot identify carriers who they have not inspected. By incorporating analysis of currently held data into a risk-based selection process for carrier inspection, the Department could provide better assurance that carriers are complying with the regulations. Without complete and current information, roadside inspectors, whether at weigh scales or mobile, will not have the information they need to properly perform their duties.

4.2 Progressive sanctions

Recommendation No. 14

We recommend that the Department of Transportation strengthen enforcement processes relating to, or arising from, roadside inspections.

Background

Procedures for progressive sanctions are being reviewed by Department staff, who informed us that they would like to increase the efficiency and timeliness of sanctions and enforcement processes.

Issues identified by inspectors that "require attention" (but are not so serious as to stop the vehicle from proceeding) require the carrier to return the inspection form to the inspector with a signature on the back stating the issue was corrected. If applicable, the carrier should also submit receipts and waybills showing the work was completed. The signature can be that of a qualified mechanic or carrier representative. In small operations, the owner can sign as having completed the work. There is no requirement for third party verification that the issue is resolved or for submission of work orders or receipts.

A vehicle cannot be placed OOS for multiple "requires attention" violations. However, an operator can be fined for these violations if the inspector deems necessary. "On monitoring" status can lead to progressive discipline if the carrier doesn't respond appropriately to the issues brought forward by the monitoring. This may include an audit of a carrier's facility.

Criteria: the standards we used for our audit

Enforcement standards should be clearly defined and consistently applied across the province.

Our audit findings

We examined 31 "on-monitoring" files—nine that resulted from CVSA inspections and 22 that we selected randomly. We found letters sent to carriers informing them of their status and requiring them to correct the noted issues in a "reasonable" time. The wording on many advises that failure to comply

Sanctions under review

No verification needed for less serious repairs ordered by inspection

Letters don't specify timelines or consequences for non-compliance

"may" lead to some sort of corrective action. The letters don't provide deadlines for compliance or a clear explanation of what consequences may follow their action or inaction.

We found only one use of an administrative penalty to a carrier who had failed six of seven criteria during a facility audit. This carrier was fined the minimum amount for the combined defects of $3,000 after being on monitoring for over two years and failing the audit. We understand this 82-vehicle carrier to be still operating.

We found 68 letters relating to 13 facility audits. Four of the audits were followed up appropriately, and the balance stated that the Department "anticipated" the implementation of the action plan, but didn't indicate a timeline or follow-up procedure. Some of the carriers had been "on monitoring" status for the same issues for over two years with no observable enforcement action being taken other then more letters being sent to them.

No evidence that a driver complaint was effectively followed-up

We reviewed a complaint from a driver about being told by the carrier to work extra hours and maintain two log books.[13] The Department's response letter to the carrier doesn't directly address the complaint, restates the contents of the carrier profile and warns that failure to improve on road performance may result in disciplinary action. There is no date for expected compliance or indication of how the letter would be followed up. Further, there is no documentation evidencing that the Department took steps to assess the merit of the allegation.

Manitoba publishes carrier information on the internet

The OOS Project makes a recommendation that the Department create a link on its website to offer public access to carrier information. This type of site is being used in Manitoba, who publishes carrier demographics, CVSA inspection results and safety rating on their site.[14]

The Department is working towards increasing its enforcement efforts. While formal policy changes are awaiting ministerial approval, the Department has provided examples of increased enforcement activities during the summer of 2009. The effectiveness and scope of these changes will be observable in the future.

Implications and risks if recommendation not implemented
Without meaningful consequence for operating in non-compliance, carriers will not change their behaviour.

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[13] Log books detail the number of hours a driver operates his or her vehicle.
[14] http://www.gov.mb.ca/mit/mcd/mcs

4.3 Analysis and measurement

Recommendation No. 15

We recommend that the Department of Transportation further develop and improve its data analysis practices for use in program delivery and performance measure reporting.

Background

Most collisions caused by driver behavior—not mechanical failure

Over 85% of commercial vehicle collisions are caused by driver attitude and performance.[15] Compared to drivers of other vehicles, commercial vehicle drivers were statistically more likely to run off the road, make an improper turn, or make an improper lane change. However, these drivers were statistically less likely than other vehicle operators to follow too closely, make an unsafe left turn, or disobey a traffic signal.[16]

Roger Clarke, an Executive Director with the Department, has been published observing that:

"…Far too little attention is paid to giving them (truck drivers) the vocational education we give to plumbers, electricians, pipefitters, hairdressers and most other trades…. There is a dearth of professional training opportunities for new drivers… it is one thing to get a licence to maneuver a truck, another thing to be a professional operator." [17]

Safety programs not mandatory

A Professional Driver Certificate and safety programs are available to drivers, but not mandatory in obtaining a licence.

Alberta participates in the Partners in Compliance Program (PIC), recognizing carriers that have demonstrated that they are operating under strict and effective safety programs. Member vehicles are equipped with transmitters that signal inspection stations that the vehicle can pass by without stopping. Currently there are 21 PIC carriers in Alberta.

Nearly half of non-compliant carriers are single vehicle operators

Large carriers generally have resources available to develop comprehensive safety plans and monitor driver performance through in-house safety officers and carrier profiles. However, 47% of "on-monitoring" carriers are one-truck

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[15] Several documents and statistical reports provided by the Department and Todd, Valerie, Ian Tomlinson, and Sylvian Tremblay. CCMTA news, *Newsletter of Canadian Council of Motor Transport Administrators,* Volume 16, No. 1 Winter 2008. ICBC, Traffic Collision Statistics. *Police-attended Injury and Fatal Collisions,* British Columbia 2007. Thiffault, Pierre Ph.D. Targeting human factors in the motor carrier industry in Canada, *International Conference of Traffic and Transport Psychology, Washington DC, 2008.* Lepofsky, Mark Ph.D., PMP. "Emerging Technologies in Hazmat Tracking and Identification Workshop," *COHMED Conference;* 2009.

[16] Department report: Alberta Traffic Collision Statistics 2007

[17] Safety for the Long Haul, Large Truck Crash Risk, Causation & Prevention, Ronald R. Knipling, Ph.D. *American Trucking Association*

operations. These operators work in more isolated environments and may not have comparable resources to dedicate to safety programs and awareness.

Goal 3 of the Ministry of Transportation's 2007–2010 business plan is to "Deliver safety focused transportation education and enforcement programs." Currently, the Department reports its activities towards this goal as "Percentage of inspected vehicles requiring on-site adjustments."

Current performance measure under review for relevancy

The data for this measure is obtained through an annual survey at 64 inspection sites across Alberta. Department staff conduct inspections of the first seven commercial vehicles arriving at the station on the survey day and report the number of vehicles taken out-of-service for mechanical violations. The OOS Project recommends that the current performance measure be removed, as it doesn't address all industry sectors, include many driver-related issues or provide sufficient information for planning.

Criteria: the standards we used for our audit

Legislative requirements should be communicated to industry and training should be provided. The Ministry of Transportation should be able to demonstrate accountability for commercial vehicle safety in Alberta and should have the systems in place to report on its operations (e.g., cost and outputs) and effectiveness (meeting objectives). Reporting should include quantifiable performance measurement where possible. The Department should use the accountability process to enhance program design and delivery.

Our audit findings

Inspection process concentrates on equipment—not driver

The existing inspection process does not incorporate driver knowledge, attitude or behaviour. Our testing of CVSA inspections showed that less than half of the issues found were for mechanical defects: the balance was split between driver hours of service, credential violations and load deficiencies. Our review of 36 carrier profiles shows 47% of the convictions, CVSA deficiencies and violations were driver related and less than 25% were mechanical defects.

The OOS Project included an operator survey. 34% of respondents replied that a reason for being placed OOS was an hours of service violation, and 81% agreed that the violation was justified. When asked why a driver would risk an OOS violation, typical responses included:

- "wanted to get home for off duty time"
- "go or get fired"
- "because I would have lost my job"
- "need to make money"
- "didn't think the violation was serious enough"

- "had to get out of the bush"
- "I just monitor it and take it easy"

Our review of the Department's records and public documents found:
- mechanical condition of the vehicle is not the major cause of collisions, as driver error is to blame for over 85% of collisions for commercial vehicles.[18]
- The top four factors in commercial vehicle collisions relate to the drivers:
  - inattentiveness 28.2%
  - error/confusion 15.6%
  - speed 14%
  - failure to yield right of way 11.8%[19]

Also, a driver with any single road conviction has a 56% increased likelihood of having a collision. This makes convictions a strong indicator of future behaviour.[20]

Opportunities exist to learn more about causes of driver behaviour

All roadside and annual commercial vehicle inspections involve an exchange with the driver. The inspector conveys information and controls the conversation; this event provides an opportunity to gather information from drivers that may not be specifically requested by the inspection form. The Department should take advantage while developing and assessing its programs to reduce collisions.

The inspection event provides a unique opportunity to communicate with, survey and educate drivers while they are actively working. By taking full advantage of this time, the Department can reinforce and deliver messages beyond those related specifically to violations or problems. Better focused information, including performance measures relating to potential causes of non-mechanical induced collisions will assist in the development of specific initiatives to reduce these types of collisions.

Data can be used to look for trends and develop strategies

Education and communication are elements of the Department's Traffic Safety Plan and the OOS Project recommendations. The Department is demonstrating recognition of these tools as proactive ways to affect driver performance.

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[18] Thiffault, Pierre Ph.D. *Targeting human factors in the motor carrier industry in Canada, International Conference of Traffic and Transport Psychology, Washington DC, 2008.*
[19] ICBC, *Traffic Collision Statistics. Police-attended Injury and Fatal Collisions,* British Columbia 2007.
[20] Todd, Valerie, Ian Tomlinson, and Sylvian Tremblay. *CCMTA news,* (Newsletter of Canadian Council of Motor Transport Administrators), Volume 16, No. 1 Winter 2008

Performance
measures should
be relevant

The CCAF[21] report Public Performance Reporting–Reporting Principles[22] recommends that measures be centered on core objectives, should be forward looking as well as retrospective, and inform the public about the goals they are pursuing and how their activities contribute to these goals. In Alberta Treasury's paper, Measuring Performance,[23] the first guiding principles are:

- focus on results—determine the effects programs are having rather than measuring what has been produced
- a few key measures per ministry—provide a snapshot of the ministry's performance for its core businesses

The current performance measurement is narrowly focused on mechanical defects for a limited population and is not reflective of activity throughout the year. It does not reflect the effects that programs are having on commercial vehicle safety and does not provide information about the safety of Alberta's roads.

Implications and risks if recommendation not implemented
Without clearly defined performance measures and analysis of its own data, the Department cannot effectively plan for and use their financial and human resources.

[21] Canadian Comprehensive Auditing Foundation, see http://www.ccaf-fcvi.com/english/index.html
[22] Public Performance Reporting—Reporting Principles- CCAF 2002
[23] Measuring Performance- Alberta Treasury 1996

Financial Statement and Other Assurance Audits

Report of the Auditor General of Alber

Government of Alberta and Ministry Annual Reports

Financial statements

Unqualified auditor's opinions

Our auditor's opinions on the Government of Alberta's consolidated financial statements for the year ended March 31, 2009 is unqualified.

We are satisfied that the transactions and activities we examined in financial statement audits complied with relevant legislative requirements. As auditors, we test only some transactions and activities, so we caution readers that it would be inappropriate to conclude that our testing would identify all transactions and activities that do not comply with the law.

We issued unqualified auditor's opinions on ministry financial statements for the year ended March 31, 2009.

At page 69 of our *April 2009 Report*, we discussed several topics that are important in understanding Alberta's consolidated financial statements.

Performance measures

Measuring Up

Unqualified auditor's opinion on *Measuring Up*

We audited 24 of the 61 performance measure in *Measuring Up* and were able to issue an unqualified auditor's opinion.

Ministry annual reports

Unqualified review engagement reports

We reviewed 141 performance measures included in 24 ministry annual reports and were able to to issue 24 unqualified review engagement reports.

Findings and recommendations

Analysis and review of performance measures—recommendation

Ministry of Treasury Board should work with ministries

The following recommendation was made as part of our audit of performance measures in *Measuring Up*. It is supported by our observations from our reviews of performance measures in ministry annual reports.

Recommendation No. 16

We recommend the Ministry of Treasury Board work with Ministries to improve processes at the ministry level relating to analysis and review of performance measures. We also recommend the Ministry of Treasury Board establish a protocol with ministries whereby it is informed of proposed changes by ministries to performance measures methodology in a timely manner.

Background

Ministries prepare and report performance measures based on data collected internally or data provided by third parties. A total of 24 performance measures are presented in *Measuring Up* as audited. Of these 24, data for five measures are generated and collected internally by individual Ministries and data for the remaining measures are compiled from survey firms, Statistics Canada and other external sources.

Ministries are responsible for reviewing performance measure results in order to provide assurance on the reliability, comparability and understandability of the information presented. The Ministry of Treasury Board relies on these processes at the ministry level.

Criteria: the standards we used for our audit

There should be consistent practices relating to the review and approval of performance measure data, calculations and disclosures.

The Ministry of Treasury Board should be aware of all revisions proposed to performance measures included in *Measuring Up*.

Our audit findings

Inconsistencies noted in the level review and analysis

Inconsistencies were noted in the level of analysis and review of performance information by management at Ministries as well as documentation supporting the analysis and review performed. Given the reliance that the Ministry of Treasury Board places on the work at the ministry level, we expected to see more consistency in the level of work performed at the ministry level to support management's assertions regarding the performance information. Inconsistencies were also noted in the level and quality of support provided to explain factors influencing actual performance results at ministries.

Ministries and the Ministry of Treasury Board should work together

This general observation, although limited to processes examined relating to the 24 audited performance measures, may also apply to processes used to report the other 37 performance measures included in *Measuring Up*. As the Ministry of Treasury Board places significant reliance on the work of the Ministries, to reduce the risk of error and misstatement, the Ministry of Treasury Board should work with

Ministries to improve the processes used to provide assurance over the reliability of performance information.

Protocol is needed for proposed changes

We also noted that a protocol with ministries is not in place to ensure the Ministry of Treasury Board is made aware of proposed changes by ministries to performance measures methodology. Communication to the Ministry of Treasury Board of proposed changes should be completed prior to ministries implementing changes to performance measures included in *Measuring Up*.

Implications and risks if recommendation not implemented
Reported performance measures may contain errors.

Aboriginal Relations

Our audit findings and recommendations

Grant monitoring—implemented

Recommendation
implemented

In our *2006–2007 Annual Report* (vol. 2, page 124), we recommended that the Ministry of Aboriginal Relations implement an effective risk-based system to ensure grant recipients comply with the terms and conditions of grants. The Ministry has implemented processes to monitor timelines for submission of required reports from grant recipients.

Financial statements

Unqualified
auditor's opinion

Our auditor's opinion on the Ministry of Aboriginal Relations financial statements for the year ended March 31, 2009 is unqualified.

Performance measures

Unqualified
review
engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Advanced Education and Technology

Summary

The Department

The Department of Advanced Education and Technology should:

- improve its processes for managing conditional grants to post-secondary institutions—see page 142
- improve its requirements for annual reports from post-secondary institutions see page 144

Entities that report to the Minister

University of Calgary

We have made several recommendations to the University of Calgary over the last few years. Currently, the University is devoting substantial resources to review and re-engineer its business processes. Although the University is making progress in improving the effectiveness of its decentralized control environment, significant control issues remain. The University still has not finalized a plan, including timelines, for resolving all key control issues. We repeated recommendations that the University improve controls over payroll functions, approval and documentation of journal entries and PeopleSoft security. We stress that the University needs to finalize its plan to address the outstanding recommendations and follow it—see pages 151 to 157.

We also made a new recommendation that the University of Calgary Board of Governors should establish systems and processes to guide all aspects of compensation, including timely negotiation and completion of pension and employment contract arrangements for senior executive positions—see page 146.

Universities' IT controls

In our *April 2008 Report* (page 191), we summarized the information technology (IT) at colleges and technical institutes, and recommended that the Department of Advanced Education and Technology give guidance to public post-secondary institutions on using an IT control framework to develop control processes that are well designed, efficient and effective. The University of Calgary and University of Lethbridge are making satisfactory progress on issues we previously raised. We made new recommendations to the University of Alberta and Athabasca University related to their IT control environment. We encourage the Universities to continue working with the Department, colleges and technical institutes to develop a provincial IT control framework—see page 161.

Past
recommendations

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Our audit findings and recommendations

1. Department of Advanced Education and Technology

1.1 Grant accountability

Recommendation No. 17

We recommend that the Department of Advanced Education and Technology improve its processes for managing conditional grants.

Background

Department issues grants for various programs

We reviewed the Department's processes for managing two conditional grant programs:

- Access to the Future Fund, which matches donations to post-secondary institutions. The Fund has paid $128 million since its inception in 2006–2007.
- Enrolment Planning Envelope, which funds one-time costs for expanding the number of students able to attend post-secondary institutions. The Department paid $275.7 million in 2008–2009 to institutions.

Conditional grants require recipients to use funds for specified purposes. The Department may also require grant recipients to return unspent funds.

Criteria: the standards we used for our audit

In managing conditional grants, the Department should:

- have processes to ensure that grant recipients meet eligibility requirements
- establish clear criteria for making grant recipients accountable for how they use the funds
- establish realistic timelines by which recipients must have used the funds and achieved the outcomes
- clearly communicate the criteria and targets to grant recipients
- follow up on grant accountability reports and evaluate whether conditions have been met and program outcomes achieved
- take corrective action where grant conditions have not been met

Our audit findings

Access to the Future Fund

Monitoring and accountability processes not implemented since 2007

The Department has not yet fully implemented its monitoring and accountability processes even though the Fund started in 2006–2007. For example, the Fund continues to match donations based on an institution's self-evaluation of eligibility, instead of the Department verifying eligibility. Although the Fund's managers have developed a post-grant review process, they plan to implement it only in 2009–2010. This review would compare grant applications with information in an institution's audited financial statements, evaluate the risk of institutions not meeting grant conditions and obtain further information from institutions where that risk is high.

Reporting requirements not clear

The Fund's guidelines ask institutions to report on their use of grant funds within four months of the fiscal year-end. But neither the guidelines nor individual grant agreements state what specific information the grant recipients must provide to verify that they have used the funds appropriately. While a grant agreement may require institutions to return unspent grants to the Fund, there is no required timeline by which the recipient must spend the funds and achieve program outcomes.

Enrolment Planning Envelope

Inconsistencies in managing grants

We found inconsistent processes for managing one-time funding for expanding the number of students able to attend post-secondary institutions. The Department:

- does not require institutions to report on their use of funds for apprenticeship training space expansions

Reports long overdue, not followed up promptly

- requires institutions to report on funds spent on one-time costs for credit program expansions, within six months of their fiscal year-end. But the Department had not received or requested accountability reports for 2006–2007 from two of the three institutions we reviewed by March 24, 2009. Department staff acknowledged that approximately 20 of 21 institutions were late in some of their reporting and that the Department was behind in sending out follow-up requests to the institutions.

Department unaware of $658,000 overpayment for apprenticeship

- has no process to follow up with institutions to review how they use funds or to identify if any funds remain unspent at the completion of the project. For example, during our audit of the one post-secondary institution for 2007–2008, we found $658,000 of unspent apprenticeship expansion funding from March 2005. This institution's staff acknowledged that this was a grant overpayment, but that institution was waiting for instruction from the Department on what to do with unspent funds. The Department was unaware of this until we asked them about it.

Department relies on institutions to spend funds appropriately

The Department requires institutions' senior financial officers to sign accountability reports for one-time credit program expansion funding. In order to rely on this assurance that funds were spent correctly, the Department should ensure that institutions have appropriate internal control systems for generating accountability reports.

Implications and risks if recommendation not implemented

Without clear processes for managing conditional grants, the Department cannot be sure that institutions have met the conditions and accomplished the results for which they receive funding.

1.2 Annual report standards for post-secondary institutions

Recommendation

We recommend that the Department of Advanced Education and Technology improve its requirements for annual reports from post-secondary institutions.

Background

Annual report provides financial and other performance information

An annual report is a comprehensive report on an organization's activities and financial performance throughout the preceding year. It is intended to keep stakeholders informed. For public institutions, annual reports are also an important way to hold senior management accountable for their control and use of public resources.

Department provides standards for annual reports

The Department has a role in communicating standards or expectations to public post-secondary institutions. The Department also monitors the sector and evaluates whether institutions are effectively managing their operations and delivering programs in a manner consistent with their approved mandate and other Ministry standards or expectations. The institutions are accountable to the Minister and the public for their use of public resources.

Criteria: the standards we used for our audit

The Department should have annual report standards that hold post-secondary institutions and their management accountable for their control and use of public resources.

Our audit findings

Institutions must send annual report to Minister

The *Post-Secondary Learning Act*[1] requires institutions to submit annual reports to the Minister of Advanced Education and Technology, including audited financial statements and any other information the Minister requires.

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[1] S.A. 2003, c.P-19.5

Weaker annual report standards exists for institutions, than for ministries

The Department requires institutions to make their annual reports available to the public, including posting the annual reports on their websites. However, while the Department encourages certain content, it does not require the institutions to provide specific information or declarations in their annual reports. The Department's current requirements for institutions set a low standard for accountability when compared to the annual report standards for government ministries, for example. The government requires ministries to provide substantial additional content and sets high standards for accountability. Among the requirements for a ministry's annual report are:

- management responsibility for reporting—A statement from the Deputy Minister acknowledging his or her responsibility to ensure that effective systems of financial management and internal control are operating within the Ministry and accepts responsibility for the accuracy of information the Ministry reports.
- results analysis (also known as management's discussion and analysis)—A balanced discussion of the Ministry's overall results and performance, including reporting on performance measures included in the Ministry's business plan. Ministries must also link financial results to the progress in achieving goals and targets for each core business.

Provides better accountability of resources and maintaining effective control systems

Annual reports from institutions should include similar accountability and responsibility declarations by presidents and senior financial officers. These declarations clearly establish individual responsibility for maintaining effective internal control systems, safeguarding assets, ensuring transactions were properly approved and complied with legislation, and correcting identified deficiencies in internal control systems. Requiring results analysis and discussion also establishes management's responsibility to account to stakeholders for their use of the public's resources.

Only three of 16 annual reports include management responsibility statement

Of Alberta's 16 public colleges and technical institutes, only three included a management's responsibility statement in their 2008 annual reports. Eight colleges included a results analysis, but four of those included only a brief discussion. For example, Grant MacEwan University[2], which had the most significant control weaknesses (reported in our *April 2009 Report*—see page 81), did not include a management responsibility statement for maintaining an effective internal control system.

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[2] By Order in Council (O.C. 481/2009 dated September 24, 2009) Grant MacEwan College's name was changed to Grant MacEwan University.

Implications and risks if recommendation not implemented

In the absence of management responsibility statements and disclosure of the results of operations, the Department has one less opportunity to hold an institution's senior officers accountable for their control and use of public resources.

2. Entities that report to the Minister

2.1 University of Calgary

Control issues identified by past audits

The University has over $2 billion in assets and spends approximately $1 billion to support the delivery of educational and research programs. In prior years, we reported on a number of internal control deficiencies. Given its size, we concluded that significant improvements were needed to make the control environment effective. Last year, on pages 213 to 215 of our *October 2008 Report*, we highlighted several issues stemming from controls operating in a decentralized environment that were insufficient to sustain efficient business processes. The University continued to improve internal controls in specific areas. For example, the University made considerable improvements over controls for sponsored research and trust accounts.

Significant challenges remain

While overall progress was made in addressing the recommendation to improve the effectiveness of the University's decentralized control environment, significant challenges remain. In dealing with this key recommendation, we also stressed that the University must promptly finalize its implementation plan and follow it. This year, we repeated recommendations for the University to improve controls in important areas encompassing payroll, journal entries and PeopleSoft security. Our audit of payroll also resulted in a new recommendation for the University to improve its executive compensation processes.

The University needs to solve its internal control issues. Until then, the University is exposed to increased risks of:

- inefficient and unsustainable business processes resulting in improper use of University resources and increased costs
- fraud and errors going undetected
- inaccurate financial information

2.1.1 Improving executive compensation processes

Recommendation No. 18

We recommend that the University of Calgary Board of Governors establish systems to guide all aspects of compensation, including timely negotiation and completion of employment contracts for senior executive positions.

Background

President's 2001 negotiated pension terms not included in employment contract signed only in 2003

The President and the former Chair of the Board of Governors (the 2001 Chair) negotiated the President's employment contract in 2001. During their negotiations, the President and the 2001 Chair agreed that the President would be left "in no worse a pension position than if he had stayed at McMaster University." However, this term was not included in the written employment contract that the President eventually signed in 2003.

President raised issue again in 2005 contract negotiations

In 2005, the President informed the then-Chair (the 2005 Chair) of an unresolved issue relating to the recognition of past service from McMaster University and asked that the matter be resolved immediately. This issue arose during discussions to extend the President's term to January 1, 2011. The 2005 Chair contacted his predecessor, who confirmed the agreement to recognize the McMaster University service, but could offer little insight into why that term was not part of the President's formal employment contract. The University then contacted McMaster University for financial information and retained a pension specialist to advise the Board on the financial implications of such prior-service recognition.

***Statement of Principles* signed in late 2006 to comply with 2001 verbal agreement**

To comply with the original 2001 verbal agreement, the President and the University signed a *Statement of Principles* in late 2006. This *Statement of Principles* recognized the President's 22 years of service with McMaster University and included the following clauses:

- The University hereby undertakes to make the President "whole" with respect to any pension, supplemental pension or other non-pension benefits that the President (or his spouse, dependants or beneficiaries) has forgone as a result of his departure from McMaster University and accepting the office of President and Vice Chancellor of the University.
- The President's annual pension under the Supplemental Pension Agreement will be calculated as follows: (2% x best average salary x total years of pensionable service with both the University and McMaster University)—(annual pension benefits under the UAPP[3] + annual estimated pension benefits in respect of the McMaster Pension Plan).

The President finally signed an amended employment contract on February 1, 2008.

Pension liability of $3.4 million

On March 18, 2009, the current Chair of the Board of Governors (the 2009 Chair) informed the Board's Audit Committee of the events that had taken place between 2001 and 2008 relating to the President's employment contract.

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[3] Universities Academic Pension Plan: The Alberta pension plan for university professors and executives. Benefits under this pension plan relate strictly to Alberta service, which the President would receive in any event.

The liability arising from such recognition had never been recorded in the University's financial statements. The Chair informed the Audit Committee that the pension liability to the University was approximately $3.4 million.

University must disclose executive salaries and pension

As a provincial corporation funded by the Government of Alberta, the University must disclose executive salaries as well as cash and non-cash benefits earned that year in its annual financial statements, in accordance with a Province of Alberta Treasury Board *Directive.*[4] This directive also requires the University's financial statements to disclose its obligations to senior executives enrolled in the University's supplemental retirement plans.

Criteria: the standards we used for our audit

The Board should:

- have a compensation committee guided by a formal compensation policy to effectively deal with senior executive employment negotiations, employment agreements, pension plans and all other aspects of recruitment, retention and compensation of senior executives
- receive, consider and confirm recommendations from the compensation committee relating to details of senior executive compensation and related matters
- have a system to ensure that the written contract reflects the terms and conditions agreed upon during contract negotiations and that University administration and other appropriate parties receive copies of the contract for action
- require that University administration carry out Board decisions about executive compensation and that the University's financial statements accurately reflect information arising from those decisions

Our audit findings

Compensation policies and processes for executive employees needs improvement

The University's compensation committee has no formal compensation policy to guide employment negotiations with executive employees. Also, the University does not have a well-defined process that includes:

- assessing the financial impact and related obligation to the University when executive employment contracts are being negotiated
- communicating key information to University Administration and ensuring that contracts are completed within a reasonable time

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[4] The *Salary and Benefits Disclosure Directive #12/98,* as amended by #03/04 and #04/07, was issued by the Alberta Treasury Board under the authority of the *Financial Administration Act.*

Our *October 2008 Report* provides guidance on compensation policies

Our audit of the Chief Executive Officer selection, evaluation and compensation systems of board-governed provincial agencies, reported in our *October 2008 Report* (page 23), provides further guidance for boards and highlights the need for boards to develop compensation policies for chief executive officers.

Five focus areas highlighted

Our review of the circumstances related to the President's employment contract resulted in five areas of focus:

1. **Terms relating to the McMaster University service excluded from the original employment contract**

2003 contract signed knowing it excluded key conditions

The 2001 Chair, who negotiated the original agreement, the 2005 Chair and the President each independently confirmed to us the circumstances as outlined in the background section of this report item. The 2001 Chair was of the view that University Administration should have known about the pension liability and included it in the employment contract that the University and the President eventually signed in 2003. The President told us that he signed the contract knowing it did not include significant benefits for him, on the basis that he had a "handshake" deal with the University and that he trusted they would do the right thing. The President went on to state that he tried on several occasions from 2003 to 2005 to have the Board amend his employment contract to conform with his understanding of the agreement; his efforts were met each time with inaction and unfulfilled promises.

2. **Time taken to finalize an employment contract with the President**

Seven years to finalize contract highly unusual

It took two years (2001–2003) for the University and the President to finalize the original employment contract—and even then it didn't include key pension terms agreed upon by the parties. It then took a further two years to begin a process to acknowledge the original (yet undocumented) pension terms, and a further three years after that to finalize an agreement. Even under the most trying of circumstances, which does not appear to have been the case here, the length of time taken to complete a reasonably routine process is highly unusual.

3. **Lack of communication between the Board and University Administration**

Insufficient information to University Administration to record pension liability in financial statements

The 2001 Chair told us that the usual course of business was to have University Administration implement the Board's administrative decisions. The 2001 Chair was of the view that University Administration failed in their duty by not ensuring the increased pension liability was recorded starting in 2002. However, he could provide no information as to why the

2003 employment contract prepared by the University did not contain the terms and conditions that he negotiated with the President.

4. **The University's obligation to pay the President according to the 2008 amended employment contract**

President will not be paid by both universities for same service

The President will not be paid by both the the University and McMaster for the same service. His final pension benefit at age 65 will be the same as if he had retired after 31½ years at the University, no more and no less. Part of his pension will come from contributions he made for 22 years of service with McMaster University, part from the UAPP and the remainder from the University. There were no substantial differences in the method to calculate the pension benefits under the McMaster and the University pension plans.

5. **The effect on the University's financial statements for the past eight years**

Pension obligation actuarially measured in 2009

In 2009, after the President announced his intention to leave the University, the University's Financial Services department reviewed the University's obligation to the President. Through this review, Financial Services became aware of the amended supplemental agreement and additional obligations of the University. Administration sought counsel from the 2009 Chair and subsequently engaged an actuarial specialist to re-measure the obligations, including the recognition of past service costs at the President's former employer.

Previous financial statements had error of $2,853,000—now corrected and pension properly disclosed

We reviewed management's assessments, the reports of the actuary and other supporting documentation, and confirmed that the University's most recent financial statements appropriately reflected the arrangements. Also, to correct the omission in financial statements over the previous seven years, the University expanded its disclosure of the transaction in the salaries and benefits note and appropriately reflected the correction of the error within the financial statements. The effect of the correction on the President's March 31, 2008 accrued benefit obligation was an increase from $522,000 to $3,375,000. The University complied with disclosure provisions noted in the Alberta Treasury Board Directive for senior executive compensation.

No inappropriate benefit to President—but highly unusual to take seven years to finalize contract

It seems highly unusual that the University and the President would take two years to negotiate an employment contract, reduce it to writing, sign it knowing it excluded significant benefits, and then take a further five years to come to a final agreement on the excluded terms. That said, there is no evidence that the President or anyone else has received or will receive an inappropriate benefit from the amendment to his employment contract. We would not, however, have expected it to take seven years to complete, or for Financial Services to know nothing about the pension liability for this same period of time.

Implications and risks if recommendation not implemented

Without effective systems and processes to guide recruitment, compensation and retention of senior executives, the University risks over-compensation of senior executives, legal liability for disputed compensation agreements and damage to its reputation, which in turn may dissuade qualified executives from considering the University as a career choice.

2.1.2 Improve the University's decentralized control environment—satisfactory progress

Background

Last year's recommendation

In our *October 2008 Report* (No. 21—page 213), we recommended that the University of Calgary improve the effectiveness of its decentralized control environment by:

- assessing whether the current mix of centralized and decentralized controls is appropriate to meet its business needs
- defining clear goals, responsibilities and accountabilities for control systems' design, implementation and monitoring
- documenting its decentralized control environment and implementing training programs to ensure those responsible for business processes have adequate knowledge to perform their duties
- monitoring decentralized controls to ensure processes operate effectively

In designing a framework of controls, the University must:

- ensure that controls are in place and operate consistently throughout the University
- consider the whole institution when evaluating business risks and synergies

Criteria: the standards we used for our audit

The University's control environment should ensure that:

- business processes are efficient and result in timely and accurate financial and non-financial information
- employees have adequate knowledge and are properly trained to perform their duties

- controls are well designed, understood, documented, assessed for adequacy and centrally monitored for effectiveness
- roles and responsibilities are defined to ensure controls are properly implemented, improved, maintained and monitored

Our audit findings

We assessed progress on implementing this recommendation as satisfactory. University Administration has assigned resources and taken steps to deal with business issues associated with this recommendation.

University-wide review initiated

Under the leadership of the Vice President of Finance and Services, the University initiated a university-wide administrative review of services it provides centrally, as well as those provided by faculties and departments. This review, known as the Innovative Support Services Project (IS2), is intended to deliver outcomes and recommend changes to improve service of the University's support functions, reduce costs of delivering these services and address aspects of this recommendation. On July 1, 2009, the President assumed leadership of this project, as one of the University's priorities. The University's 2009–2013 Business Plan states that the review of administrative functions is a strategic priority for 2009–2013.

Will document critical business processes

In March 2009, the University's Vice President of Finance and Services also announced a re-engineering exercise designed to document all critical University processes associated with its PeopleSoft system, including payroll, accounts payable, personal expenses reimbursement, and research and trust accounting.

Implementation plan needs prompt attention

Despite its initial timelines for some of the initiatives, the University has not finalized its plan to fully implement this recommendation. This implementation plan should be promptly finalized before the next audit. The plan should include timelines for key activities, so that senior management and the Audit Committee can ensure they are making sufficient progress.

What remains

To fully implement this recommendation, the University must:
- confirm and document its implementation plan by setting out key deliverables and dates
- complete its administrative reviews of business processes to improve efficiencies and enable reliable financial and non-financial reporting
- design and operate controls that are understood, documented, assessed for adequacy and monitored centrally for effectiveness
- design programs to ensure employees have adequate knowledge and are properly trained to perform their duties

- define roles and responsibilities to ensure controls are properly
  implemented, improved, maintained and monitored

2.1.3 Improve payroll controls—recommendation repeated

Second time we repeat this recommendation

We first made this recommendation in our *2006–2007 Annual Report* (vol. 2—page 12), and repeated it in our October *2008 Report* (vol. 2—page 216). For the second time, we have repeated this recommendation because the University has still not taken sufficient steps to mitigate the risks of incorrect payroll and protecting payroll information. For the year ended March 31, 2009, the University spent $570 million on payroll and benefits costs, which accounted for approximately 60% of the University's total expenses.

Recommendation—repeated

We again recommend that the University of Calgary improve controls over payroll functions.

Background

Issues originally reported in 2007

In 2007, the University implemented the payroll and human resource module in PeopleSoft.[5] We recommended in our *2006–2007 Annual Report* (vol. 2—page 12) that the University improve controls over payroll, as terminated employees were overpaid and staff access to the payroll module was improperly segregated. Management agreed with the recommendation and planned to improve controls and processes in the payroll area by the end of the 2008 fiscal year.

Criteria: the standards we used for our audit

The University should have adequate controls to ensure that it approves and properly monitors new employees, terminations and job-change information. In addition, salary and benefits paid to employees should be supported by appropriate documentation.

Our audit findings

University internal audit also found several control weaknesses

The University implemented controls to correct some of the deficiencies we previously identified. However, we repeat this recommendation because the University still lacks sufficient controls over the payroll functions. Similar to the issues we previously raised, the University Audit Service's August 2008 report on Central Human Resources and payroll functions also found several control weaknesses that relate to approval and setup of new hires, payroll changes, salary recoveries, payroll reconciliations and inefficient business

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[5] PeopleSoft is an enterprise resource planning computer program used by the University to handle financial and business processes.

processes. This year, we also found an error relating to the year-end process for accruing payroll costs.

2.1.3.1 Improve new employee controls—unsatisfactory progress

Access controls to payroll and timesheet still require improvements

Last year, we identified a control weakness that allowed 291 people access to create hourly employees in the Payroll module and enter timesheet information. To address this, management circulated a memo in February 2009, and again in April 2009, to individuals who have access to both the job and timesheet reporting modules of PeopleSoft. These individuals were to specify which module they require access to. Based on the results of this information, the University will restrict each individual's access to one of the two modules.

Access to personal information of new staff not adequately restricted

In the current audit, we identified an additional weakness in new employee controls. New hire forms contain confidential and sensitive information such as pay rates and bank account details. Once a central Recruitment Administrator has completed and reviewed the form, it is saved on a shared drive. This drive is accessible to the entire Central Human Resources office, at which point information could be changed before a Workforce Administrator uploads it into PeopleSoft. This poses a risk because unapproved changes to forms may lead to fraudulent activity. Additionally, as personal information about employees is not restricted, it could be misused, and making confidential information available to everyone who has access to a shared drive is not a good business practice.

2.1.3.2 Improve documentation controls—unsatisfactory progress

Managers don't approve overtime, vacation and sick leave for all employees

Last year, we noted that some payroll controls are decentralized and are not adequately designed to ensure payroll amounts are supported by adequate documentation. This continues to be an issue. For salaried employees, exception time, such as overtime, vacation or sick leave, is entered into PeopleSoft at the department level. Employees' managers must approve the time in PeopleSoft. Central Human Resources automatically approves, on a mass basis, any exception time not approved by an employee's manager. This applies to approximately 100 employees per pay cycle. For one pay period we selected, Central Human Resources approved the exception time for 93 employees. Controls over approval of exception time are not operating consistently and effectively. Instead of approvals by Central Human Resources, the more appropriate control is for an immediate supervisor to approve exception time.

2.1.3.3 Improve job change controls—implemented

Last year, we identified a control weakness that allowed researcher salaries to be incorrectly recorded to the wrong project after the researcher changed projects or roles. This year, when an employee changes positions, the

department completes a Job Change form and Central Human Resources enters information such as pay rates and job coding information into PeopleSoft. We did not identify any incorrect coding of researcher's salaries to research projects.

2.1.3.4 Improve termination controls—implemented

The University implemented a termination checklist in November 2008. When an employee is terminated, their final pay is held up to ten days, until the employee's department has completed the checklist and delivered it to Central Human Resources. We did not identify any overpayments.

Implications and risks if recommendation not implemented

Without an adequate control environment over payroll processes, the University of Calgary is at increased risk for incorrect payroll payments and misstatements in financial statements.

2.1.4 Improve PeopleSoft security—recommendation repeated

Repeated recommendation for third time

We first made this recommendation in our *2005–2006 Annual Report* (vol. 2—page 24), and repeated it in our *2006–2007 Annual Report* (vol. 2—page 13) and our *October 2008 Report* (No. 22—page 219). For the third time, we have repeated this recommendation because the University still did not take sufficient action to implement the remaining parts of this recommendation to mitigate PeopleSoft security risks this past year.

Recommendation No. 19—repeated

We again recommend that the University of Calgary improve controls in its PeopleSoft system by:

- **finalizing and implementing the security policy and security design document**
- **ensuring that user access privileges are consistent with the user's business requirements and the security policy.**

Background

PeopleSoft implemented in phases significant security issues remain

In April 2004, the University started a three-year project to move several critical business and financial processes to PeopleSoft, an ERP (see glossary on page 347). Considerable time has passed since our original recommendation and the University has implemented parts of our recommendation. However, the University did not take sufficient action to properly mitigate PeopleSoft security risks this past year. Given the importance of resolving security deficiencies and the University's lack of progress in implementing the remaining parts of the recommendation, we are making this recommendation for a fourth time.

Criteria: the standards we used for our audit

The University should have well-designed and effective procedures to reduce the risk of unauthorized or inappropriate access to PeopleSoft programs and data by:

- implementing a comprehensive security policy and maintaining an up-to-date security design framework for the PeopleSoft control environment
- controlling access by defining and enforcing procedures to identify, authenticate, and authorize the use of PeopleSoft and to ensure that only authorized changes are made to user accounts (additions, deletions, changes) and that they are made promptly
- developing and implementing a security policy for administrative systems
- implementing an effective control process to periodically review the appropriateness of user access rights and restricting user roles and functions they can perform

Our audit findings

Unsatisfactory progress on security policy and security design framework

The University did not make satisfactory progress implementing a comprehensive security policy and updating its PeopleSoft security design framework. We found the following areas incomplete:

- The security design framework does not have definitions for all user access roles used in PeopleSoft.
- User access roles in two of the PeopleSoft modules (Financial and Supply Chain Management and Human Capital Management) are different and may be incompatible.
- The University updated its security design documentation for Financial and Supply Chain Management modules. However, it will not be approved or implemented until University management has evaluated and validated the system's privileged access reports. The University expected to complete its evaluation and validation by the end of September 2009.
- PeopleSoft security design documentation for the Human Capital Management module is not finished. The University expected a target completion date of June 2009.

Progress in some areas

The University made progress by:

- controlling access to PeopleSoft:
  - The University reduced the number of users it authorizes to change current or historical PeopleSoft data. We also confirmed that the changes made by a limited number of Central Human Resource people who kept this function are subject to validation and review.
  - The University is developing security procedures to update access when people change jobs. The University has implemented an automated tool for removing roles when staff employment with the

University ends. However, further work is required to ensure contractors and other temporary users are also promptly removed. Implementation is expected in September 2009.

- developing and implementing a security policy for administrative systems.
- developing an effective process for monitoring, identifying and responding to security threats. However, the standards for identifying and monitoring specific threats to systems—including PeopleSoft—are currently in draft form.
- implementing an effective control process to periodically review the appropriateness of user access rights. The University completed a review of PeopleSoft privileged access in January 2009. The University plans to evaluate and validate, and act on issues from the privileged access reports by fiscal 2010.

What remains

To fully implement the recommendation, the University must:

- complete the development and implementation of a comprehensive security policy and update its PeopleSoft security design framework accordingly.
- complete the development and implementation of well-designed controls to ensure that access to PeopleSoft is well controlled and that users only have the access they need for their job roles and functions.

Implications and risks if recommendation not implemented

Weak access controls to and within PeopleSoft may result in unauthorized access to confidential data, entry of unauthorized transactions, and the accidental or deliberate destruction or alteration of data. Poor controls may also allow the unauthorized release of confidential student or financial information. Therefore, the University may not be able to rely on the completeness, accuracy and validity of the student and financial data produced by PeopleSoft.

2.1.5 Improving controls over journal entries—recommendation repeated
Recommendation
We again recommend that the University of Calgary improve controls over approvals and documentation for journal entries.

Background

Journals processed throughout University

Journal entries are processed at Financial Services, faculties, departments and business units. They can be used to record transactions not generated by the accounting system, correct errors, and reclassify items. Proper controls over journal entries is important, as they can be used to bypass other control processes.

In our *October 2008 Report* (page 217), we recommended improvements in controls over journal entries. In our *2006–2007 Annual Report* (vol. 2— page 17), we also reported on management's investigation of journal entries processed by a former employee at Campus Infrastructure that were inappropriate. Last year, we highlighted the decentralized processes as a contributing factor in failure of financial controls, inefficient and unsustainable business processes, and financial reporting errors.

Criteria: the standards we used for our audit

The University should maintain adequate controls to ensure journal entry transactions are correct and are reviewed, approved and substantiated by sufficient supporting documentation.

Our audit findings

We repeat the recommendation because the University's progress remains unsatisfactory. Management stated that they would finalize a policy, which they had drafted in January 2008, by June 2008. However, the University missed this deadline and has now set a March 31, 2010 deadline to fully implement policies that would apply to all faculties, departments and business units. Proper controls over journal entries are critical, given that journal entries can be used to conceal fraudulent activities.

Issues remain

We continue to see issues relating to journal entry controls. Here are some examples:

Inconsistencies in review, approval and supporting documents

- The University's decentralized environment lends itself to inconsistencies in practices. Journal entries are processed at Financial Services and in faculties, departments and business units. Controls over journal entries vary within each of these groups. There is no uniform policy that dictates a process for approval and review or identifies types of supporting documents required before processing journal entries. Financial Services has defined and enforced processes for journal entries at the central accounting office. However, these processes are not followed at faculties, departments and business units.

Insufficient training

- The creators and approvers of journal entries may not have sufficient financial statement knowledge to recognize erroneous or fraudulent journal entries. For example, in one instance, the preparer made incorrect journal entries when requesting cash transfers from a central department by charging the business unit's cost of sales account instead of the unit's cash accounts. The reviewer approved the entries without noting the errors.

No central monitoring function

Our observation is that no single group at the University has taken the initiative to improve the journal entry process. In previous years, Financial Services commissioned a review of the journal entry process. Their review

recommended several key improvements. Although Financial Services addressed some issues, their recommendations did not apply to the University as a whole.

Implications and risks if recommendation is not implemented
Without adequate controls over journal entries, the University may not ensure that it will detect inappropriate, erroneous or fraudulent entries that might cause misstatements in the financial statements and undetected fraud.

2.1.6 Improve controls over investments—implemented
Background
In our *October 2008 Report* (page 221), we recommended that the University of Calgary improve its controls over transactions for investments it manages internally.

New transaction approval process

The University has implemented this recommendation. It implemented a formal process that requires the timely monitoring and approval of investment transactions. We tested a sample of transactions and found that the Treasurer and Director of Investments had properly approved the transactions.

2.1.7 Comply with legislation—implemented
Background
In our *October 2008 Report* (page 222), we recommended that the University of Calgary comply with the *Post-Secondary Learning Act*[6] by seeking approval of the Lieutenant Governor in Council before engaging in housing loan guarantee transactions.

The University sought the Lieutenant Governor's retroactive approval for previously issued housing loan guarantees. The Ministry of Advanced Education and Technology informed the University that the Lieutenant Governor's retroactive approval of the transaction cannot be obtained. As a result, the University has suspended the program as of June 2008. Due to contractual obligations, the University is not in a position to withdraw from guarantees already made. Also, the University plans to honour commitments made in offer letters issued prior to June 2008. The University intends to ensure future compliance with the *Act*.

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[6] S.A. 2003, c.P-19.5

2.1.8 Capital construction project management controls—implemented

Background

In our *1999–2000 Annual Report* (page 233), we recommended that the University of Calgary strengthen its project management controls over capital construction projects. In 2005, we assessed the progress and found that the University made satisfactory progress implementing parts of the recommendation. This year, our audit work focused on the two parts of the recommendation that remained outstanding.

The University implemented our recommendation by introducing formal processes for:

- reviewing the performance of employees who manage capital projects
- closing completed projects using tools such as a closeout checklist and project sponsor signoff to indicate they accept a project's constructed assets

2.2 University of Alberta—Improve investment controls—implemented

In our *October 2008 Report* (No. 20—page 211), we recommended that the University of Alberta:

- provide increased levels of detail on investments to the Investment Committee to facilitate the monitoring of the University's investments
- implement approval procedures for new investment vehicles

The University has implemented this recommendation. It has provided the Investment Committee with detailed lists of investments in quarterly reviews for internally and externally managed investments, as well as ensuring additions to the list of approved securities are approved by the Director and Treasurer of Financial Services.

2.3 University of Lethbridge—Improve the University's financial processes— implemented

In our *October 2008 Report* (page 223), we recommended that the University of Lethbridge improve its year-end processes to ensure the preparation of complete and accurate financial statements.

The University implemented the recommendation. It hired a manager responsible for financial reporting. It also purchased Caseware software to automatically produce the 2008–2009 financial statements, schedules and lead sheet preparation, instead of the manual processes that was followed in the previous year. The University reviewed all current and potential contractual agreements in order to identify potential accounting issues, and reviewed and assessed the impact of any new accounting pronouncements that may affect the financial statements.

2.4 Information technology controls for all universities—progress report

Background

Previous issues reported to Department

In our *April 2008 Report* (No. 8—page 195), we recommended that the Department of Advanced Education and Technology give guidance to public post-secondary institutions on using an IT control framework to develop control processes that are well designed, efficient, and effective.

Previous issues at Universities of Calgary and Lethbridge

In our *2006–2007 Annual Report* (vol. 2—page 10), we recommended that the University of Calgary implement an IT governance and control framework. Last year, we rated the University's progress implementing this recommendation as satisfactory. In that same report, (No. 21—page 23), we recommended that the University of Lethbridge enhance controls over its information technology by implementing an IT control framework.

Purpose of IT control framework

An IT control framework, such as COBIT (Control Objectives for Information and Related Technology), is a means to attain sufficient and effective controls over an organization's information and the systems and processes that create, store, manipulate and retrieve important data. Successful implementation of the framework depends on support from key officials such as the President, Board of Governors and the Chief Information Officer (CIO).

Purpose of IT controls

Well-designed and effective IT control processes developed through an IT control framework are the best way to preserve the security and integrity of an organization's information and systems. A comprehensive IT control framework should be a critical part of the University's internal control program to mitigate risks and should:

- provide secure programs and services to staff and students
- protect the confidentiality and security of financial and student information
- ensure that systems work as expected and are available when needed

Our audit findings

New provincial initiative to develop IT control framework

The Department started a provincial initiative to implement a provincial IT control framework based on COBIT. The Institutions participated with the Alberta Association in Higher Education for Information Technology (AAHEIT) to develop a provincial IT control framework standard and supporting policies and procedures.

Satisfactory progress

We followed up our previous recommendation at the:

- University of Calgary (*2005–2006 Annual Report,* vol. 2—page 20 and *2006–2007 Annual Report,* vol. 2—page 10)—it has fully implemented three parts, has made satisfactory progress on two and less progress on the three other parts of the original recommendation. Overall, we concluded the progress in implementing the recommendation is satisfactory.

- University of Lethbridge, *2006–2007 Annual Report* (No. 21, vol. 2—page 23)—made satisfactory progress implementing the recommendation. It drafted, but has not formally approved, a set of IT policies, has made significant improvements in how it manages change, such as following a defined workflow and tracking the changes to Banner, and also hired IBM to help implement Information Technology Infrastructure Library and to improve the University's processes for managing systems changes.

New recommendations to:

This year, we made new recommendations to the University of Alberta and Athabasca University to improve their IT controls.

University of Alberta

The University of Alberta needs to:
- define and implement an effective University-wide IT governance program for critical IT systems
- develop comprehensive University-wide IT policies, procedures and standards to support an IT strategy for its critical systems
- implement effective control processes that ensure these policies, procedures and standards are monitored and consistently met throughout the University
- develop a University-wide plan to implement well-designed and effective IT security controls to support the University's information security policy framework

Athabasca University

Athabasca University needs to improve its information technology control framework by:
- performing annual risk assessments and implementing IT controls to mitigate identified risks
- implementing appropriate security over financial information and related IT assets, including access controls
- appropriately managing changes to computer programs

We encourage universities and colleges to continue working together and with the Department on the provincial initiative.

2.5 Review accounting treatment for Universities Academic Pension Plan for all universities—implemented

The Universities participate, together with the Banff Centre, in the Universities Academic Pension Plan. UAPP is a registered, jointly sponsored defined-benefit pension plan that pays retirement, disability, spousal/survivor and termination benefits to eligible members or their eligible survivors. UAPP's financial statements of December 31, 2008, reported an unfunded liability of $1.055 billion.

In our *October 2008 Report* (No. 23—page 232), we recommended that the four Alberta universities continue to work together—and with the Department of Advanced Education and Technology—to review the accounting treatment for the unfunded liability of the UAPP.

The universities worked together and now have:
- recorded the liability in their respective financial statements
- used the same assumptions set by the UAPP Board of Trustees to value the total liability
- allocated the total liability to each university based on a percentage of pensionable earnings
- restated their previous year's balances based on a change in accounting policy
- presented the effect of these changes similarly in the respective universities' financial statements

Universities now record liability for UAPP

We agreed with the Universities' conclusions. We audited the actuarial valuation of the liability, the allocation to each university and its presentation in that university's financial statements. We are satisfied that the liability is fairly recorded and disclosed.

Financial statements

This chapter includes the results of our March 31, 2009 financial statement and performance measures audits, which we completed after our *April 2009 Report*, of the following organizations:
- Ministry of Advanced Education and Technology
- Department of Advance Education and Technology
- Access to the Future Fund
- Alberta Enterprise Corporation
- Four of Alberta's universities
- Alberta Research Council
- iCORE Inc.
- Alberta Heritage Foundation for Medical Research
- Alberta Heritage Foundation for Science and Engineering Research

Our April 2010 report will include the results of the financial statement audits of public colleges, technical institutions and their related entities. These organizations have a June 30, 2009 year-end, and our work will be completed by November 2009.

Unqualified
auditor's opinions

Our auditor's opinions on the financial statements of the Ministry, Department, Alberta Research Council, iCORE Inc., the Access to the Future Fund and the Alberta Enterprise Corporation for the year ended March 31, 2009, are unqualified. Our auditor's opinions on the financial statements of the Alberta Heritage Foundation for Medical Research and Alberta Heritage Foundation for Science and Engineering Research for the year ended March 31, 2009, are also unqualified.

Unqualified
opinions for
universities

Our auditor's opinions on the financial statements for the year ended March 31, 2009 of the following universities are unqualified:

- Athabasca University
- University of Alberta
- University of Calgary
- University of Lethbridge

Performance measures

Unqualified
review
engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Agriculture and Rural Development
Summary

The Department of Agriculture and Rural Development has:
- made satisfactory progress implementing our 2000–2001 recommendation relating to grant accountability systems—see below
- implemented our 2005–2006 recommendation to finish verifying eligibility for the cattle set aside program—see page 168
- implemented our 2003–2004 recommendation to complete a risk assessment and develop a risk mitigation and response strategy based on the risk assessment—see page 168

Agriculture Financial Services Corporation (AFSC) should:
- complete an IT risk assessment—see page 168
- perform independent verification of cost-effectiveness of debt restructuring—see page 170
- reviews its investments on a quarterly basis—see page 170

AFSC has implemented our 2006–2007 recommendation to assess the risks associated with wireless networking and improve controls for the risks identified—see page 171

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Our audit findings and recommendations

1. Department of Agriculture and Rural Development
1.1 Grant accountability systems—satisfactory progress

Background

In our *2000–2001 Annual Report* (No. 3—page 50), we recommended that the Department evaluate the success of its grant programs in meeting Ministry goals. This included evaluating the grant programs themselves as well as individual grants within the programs.

Need to improve grant systems

In 2004–2005, we followed up on our recommendation by examining nine grant programs from the 2003–2004 fiscal year. We found that the Department did not make satisfactory progress implementing the recommendation. We again recommended that the Department strengthen its grant management

system and evaluate the success of its grant programs[1] by developing a system to periodically evaluate the performance of its grant programs, establishing quantifiable performance measures and targets for its grant programs and conducting post-completion evaluations for individual grants awarded.

Our objective this year was to determine if the Department has implemented our recommendation No. 20 in our *2004–2005 Annual Report* on grant accountability.

We assessed the Department's progress against the four criteria outlined in our 2004–2005 recommendation:
1. to periodically evaluate the performance of its grant programs
2. to establish quantifiable performance measures and targets for its grant programs
3. to conduct post-completion evaluations for individual grants awarded
4. to define reporting requirements for individual grants that include outcomes

Our audit findings

Significant improvements to grant processes

The Department has made satisfactory progress, but has not yet fully implemented our recommendation on evaluating the success of its grant programs. Significant improvements have been made in the areas of grant program review, establishing performance indicators, and conducting post-completion evaluation and defining reporting requirements for grant programs. In 2008, the Department completed a comprehensive review of all programs as part of its strategy to better position itself to assist the industry. The Department also began to use a new Operational and Reporting System (OPAR) for a more effective way to report on its grant programs.

Periodic review of grant programs

Department reviewed several grant programs

We found the Department took the following steps in implementing our recommendation:
- In 2006, the Department reviewed the processes and controls of three significant programs—Agriculture Service Board program, Agriculture Initiative program and Agricultural Society programs.
- In 2008, the Department completed a formal evaluation of all its grant programs as part of the 2008 restructuring to position itself to better assist the livestock industry. The review involved reassessment of each program and its alignment with the Department's strategic objectives, evaluation of external and internal partners, and review of the process and outputs of each grant program.

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[1] *2004–2005 Annual Report of the Auditor General of Alberta*, Recommendation No. 20

Quantifiable performance measures and targets for grant programs

Developed measures for grant programs

We found the Department took steps in implementing our recommendation. In 2008, the Department implemented OPAR—Operational and Reporting System. OPAR is a web-based application, created to facilitate the development of a ministry operational plan and to enable review of consistent sector and division operational plans across the ministry. OPAR encompasses the strategies and performance measures contained in the ministry's business plan, as well as day-to-day business activities and targets from performance reporting criteria. All grant programs can be linked to performance indicators.

Reporting systems still being implemented

Our examination of the system revealed that OPAR is not fully operational yet. The divisional plans are still in the process of being finalized and keyed into the system. The performance indicators report that we reviewed in July 2009 included few initiatives, however no grant programs were linked to performance indicators yet. The Department expects to finalize this process at the end of September 2009.

Post-completion evaluation

Post completion evaluation done

In 2008–2009, we examined a sample of 30 grants covering 20 programs to test whether a post-completion evaluation is completed on a timely basis. We found that 20 of 30 grants had post-completion evaluations in place. For the remaining 10 grants, post-completion evaluations were not applicable due to timing or because they were deemed to be insignificant. Steps are taken to develop post-completion evaluation for all new grant programs.

Reporting requirements to include outcomes

Monitoring of program outcomes

Our examination of 30 grants covering 20 programs from the 2008–2009 year revealed that 18 of 20 grant programs did have a monitoring process in place. The remaining two grants were introduced in 2008–2009 and the amounts were not significant. Through a centralized approach in Financial Advisory Services, the Department is continuously revising the monitoring system to ensure that all grants include strict reporting requirements based on specific outcomes.

What remains to be done

To fully implement this recommendation the Department needs to:
- develop a systematic process to periodically evaluate its grant programs
- assign performance indicators or other measurable outcomes to grant programs

1.2 Verifying eligibility for Cattle Set Aside program—implemented

In our *2005–2006 Annual Report* (vol. 2—page 40), we recommended that the Department finish verifying if participants complied with the time requirements of the Canada–Alberta Fed Cattle Set Aside program and decide if further action is necessary.

Assessed program compliance and potential overpayments

The Department used a risk-based approach to assess participants' compliance with program requirements. The Department identified possible non-compliant tags and estimated the potential overpayments to participants. The overall results were that the maximum possible overpayment was not significant, so the Department decided not to pursue with further investigation. We agree with the Department's assessment and conclude that this recommendation has been implemented.

1.3 Risk assessment—implemented

In our *2003–2004 Annual Report* (No. 3—page 80), we recommended that the Department complete a risk assessment that analyzes the probability and impact of major risks to the agriculture and Agri-food industry in Alberta. We also recommended that the Department develop risk mitigation and response strategies based on the risk assessment.

Risks identified and assessed

The Department has implemented this recommendation by establishing a risk assessment framework that identifies the key risks facing the Department in achieving its goals, objectives and strategies. The Department also assessed the risks in terms of likelihood and potential impact and developed an approach to monitor and manage each key risk.

Plans to integrate risk assessment with business plan

The Department plans to periodically update the risks management process and closely monitor the risks identified. The Department plans to integrate the enterprise risk management process into the business planning process. A reporting system will be fully operational in 2009–2010 to link the risks identified to the strategic and operational indicators.

2. Agriculture Financial Services Corporation

2.1 IT risk assessment and control framework

Recommendation

We recommend that Agriculture Financial Services Corporation:

- **complete an Information Technology (IT) risk assessment to identify and rank the risks within its computing environment, linking to business objectives; and**
- **design and implement IT controls to mitigate the risks it identifies.**

Background

A risk assessment identifies and ranks risks based on their likelihood and impact. Once risks are identified and ranked, it is easier to decide what IT control activities to implement to protect important financial and business systems and data against these risks, and what risks to accept if they can't be mitigated.

An IT control framework, such as Control Objectives for Information and related Technology (COBIT), can be utilized to bridge the gap between control requirements, technical issues, and business risks. It gives senior management and IT users generally accepted measures, indicators, processes and best practices to maximize IT benefits and minimize risks.

Criteria: the standards we used for our audit

Alberta Financial Services Corporation should:

- have an IT risk assessment strategy and regularly identify and assess its risks, and define a process to accept risks that IT controls cannot efficiently or effectively mitigate
- design and implement appropriate and effective IT controls to mitigate the identified risks

Our audit findings

Need to link risk assessment to business objectives

AFSC has not fully implemented their formal risk assessment framework. AFSC's IT team has completed an initial, high-level risk assessment, but only from an IT perspective without a formal link back to AFSC's business objectives. The IT team has also developed a matrix of their identified risks, and have ranked these risks based on severity and criticality. But, they haven't conducted a detailed risk analysis or created a roadmap to resolve the identified risks.

Need action plan to resolve risks

To fully implement this control, AFSC should continue pursuing the objectives outlined in its Information Risk Assessment Project Charter and fully document the activities required to complete the third milestone—an action plan for addressing risk.

Implications and risks if recommendation not implemented

Without an IT risk assessment, AFSC may not be able to rely on the completeness, accuracy, availability or validity of its financial information. Confidential financial information may be used or disclosed in a way that leads to fraud, loss of money or reputation.

2.2 Note payable repurchase

Recommendation

We recommend that Agriculture Financial Service Corporation perform an analysis on debt restructuring to verify cost effectiveness and confirm alignment with its overall cash management objectives.

Background

In August 2008, Alberta Finance communicated to AFSC the opportunity to repurchase $67 million, 5.93% bonds payable due September 2016 and replace it with $75 million, 3.25% bonds payable due March 2011. Alberta Finance stated that this repurchase would save AFSC approximately $480,000.

Criteria: the standards we used for our audit

Agriculture Financial Services Corporation should perform their own internal analysis of debt restructuring to ensure that it is cost effective and that it aligns with AFSC's overall cash management objective.

Our audit findings

Need to verify cost savings on debt restructuring

Agriculture Financial Services Corporation did not perform its own analysis of the debt restructuring opportunity identified by Alberta Finance to verify cost effectiveness. Also, AFSC did not ensure the results of the transaction aligned with its overall cash management objectives.

Implication and risks if recommendation not implemented

Agriculture Financial Services Corporation may make some decisions that are not cost effective or not aligned with its cash management policy and strategy.

2.3 Investment portfolio analysis

Recommendation

We recommend that Agriculture Financial Services Corporation perform a quarterly review of the market value of its investment portfolio.

Background

The investment portfolio of AFSC is managed by Alberta Investment Management Company (AIMCo). AIMCo submits monthly portfolio reports to AFSC detailing AFSC's investment portfolio by individual holdings (bonds, securities and asset-backed securities). This report provides information on the performance of AFSC's investments by comparing market value to book value.

Criteria: the standards we used for our audit

Agriculture Financial Services Corporation should periodically review the fair value of its investment portfolio by financial instrument to determine whether a write-down is required. The following criteria may be incorporated in the analysis:

- if there is a loss in value of a portfolio investment that is other than a temporary
- if there is management intention to trade or liquidate the security
- if the decrease in the market value compared to the carrying value is over 20%

Our audit findings

No regular process
to assess
investment values

Agriculture Financial Services Corporation does not have a regular process to analyze the performance of its portfolio investments to verify valuation and determine whether a write-down from book value to market value is required. A review should be conducted on a quarterly basis and any required write-downs should be recorded immediately.

Implication and risks if recommendation not implemented

Agriculture Financial Services Corporation may fail to recognize a write-down of its investments in the proper period.

2.4 Wireless technology—implemented

In our *2006–2007 Annual Report* (vol. 2—page 32), we recommended that the Agriculture Financial Services Corporation assess the risks associated with wireless networking and implement policies and improve controls for the risks identified.

Monitors and
investigates use of
wireless
technology

Agriculture Financial Services Corporation has implemented this recommendation by developing and implementing procedures to manage the use of wireless technology in its computing environment. AFSC now conducts regular scans to identify unauthorized wireless access points. Scan results are documented, unknown access points are further investigated and disabled if they are found to be unauthorized.

Financial statements

Our auditor's opinion on the Ministry and Department's financial statements for the
year ended March 31, 2009 are unqualified.

Our auditor's opinion on the Agriculture Financial Services Corporation's financial
statements for the year ended March 31, 2009 is unqualified.

We issued unqualified auditor's opinions on the reconciliations of administration
costs and program payments for the Canadian Agricultural Income Stabilization and
AgriStability Programs for all program years ended March 31, 2009.

Performance measures

The Ministry engaged us to review selected performance measures in the Ministry's
2008–2009 Annual Report. We issued an unqualified review engagement report on
these measures.

Children and Youth Services
Our audit findings and recommendations
Contract management systems—implemented
In 2001–2002 (No. 8—page 53), we recommended that the Ministry strengthen the process used to award and manage contracts. In 2004–2005 and 2007–2008, we followed up and concluded that the Ministry had made satisfactory progress in awarding contracts, but needed to periodically evaluate contractors' performance.

Management implemented our recommendation by completing contractors' assessment forms for each contract that has been completed.

Past recommendations

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Financial statements

Unqualified auditor's opinions

Our auditor's opinions on the Ministry and Department of Children and Youth Services, and ten Child and Family Services Authorities for the year ended March 31, 2009 are unqualified.

Performance measures

Unqualified review engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Culture and Community Spirit

Past recommendations

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Financial statements

Unqualified auditor's opinions

Our auditor's opinions on the financial statements of the Ministry, Department and the following six provincial agencies for the year ended March 31, 2009 are unqualified:

- Alberta Foundation for the Arts
- Alberta Historical Resources Foundation
- Government House Foundation
- Historic Resources Fund
- Human Rights, Citizenship and Multiculturalism Education Fund
- Wild Rose Foundation

Performance measures

Unqualified review engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Education

Summary

The Department of Education implemented our recommendation relating to savings generated by the Learning Resource Centre—see below.

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Our audit findings and recommendations

Savings generated by the Learning Resource Centre—implemented

In our *2004–2005 Annual Report* (No. 27—page 157), we recommended that the Department of Education implement a system to periodically evaluate the savings generated by the Learning Resources Centre.

Assessment methodology

The Department completed its evaluation of cost savings provided to school jurisdictions by analyzing over 200 invoices generated by the Centre between April 1, 2007 and March 31, 2008. The Department extrapolated these results to all sales for that year.

Savings achieved

The analysis estimated that school jurisdictions saved $2.9 million by buying learning resources from the Learning Resources Centre as compared to direct purchases from the publishers.

Operating costs considered

After including the costs of operating the Centre, such as costs of supporting infrastructure, the Department concluded that the Centre provides a net saving of $2.3 million to the K-12 sector. The Department also evaluated the effect of other Ministry initiatives the Centre is involved in, such as negotiating standing offers that allow school jurisdictions to purchase computer hardware and software at lower prices, and providing specialized services for the visually impaired. The Department plans to evaluate the savings generated by the Centre every three years.

Financial statements

Unqualified auditor's opinions

Our auditor's opinions on the financial statements of the Ministry, Department, and the Alberta School Foundation Fund for the year ended March 31, 2009 are unqualified.

Performance measures

Unqualified
review
engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Employment and Immigration

Summary

We examined the Department's systems for delivering the Homeless Eviction Program (HEP) Fund. The HEP Fund has been discontinued, but we have made the following recommendations that are applicable to ongoing programs of the Department:

- the Department should improve the processes of its fraud investigation units by defining clear objectives and establishing criteria for its investigations—see page 186
- the Department should improve plans and set timelines for resolving non-compliance matters and reducing the types of errors identified by its internal auditors—see page 189

The Department has implemented our recommendation to improve its capital asset policy and procedures—see page 190

Our previous recommendation to improve controls to prevent duplicate Income Support payments is no longer valid due to changed circumstances—see page 190

The Workers' Compensation Board should:

- assess whether it is conducting sufficient claims audits each year—see page 191
- formalize its information technology security monitoring procedures— see page 192

WCB has implemented our October 2008 recommendation to enforce procedures and guidelines for its purchasing card program—see page 193

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Our audit findings and recommendations

1. Department of Employment and Immigration
1.1 Homeless and Eviction Prevention Fund
    What we examined
    We examined the Department of Employment and Immigration's systems to assess the eligibility of applicants to the HEP Fund, ensure HEP Funds are paid in accordance with its policies and procedures, and identify and deal with suspected abuse of the HEP Fund.

HEP Fund
introduced in 2007
and discontinued
in 2009

The Department introduced the HEP Fund in May 2007 to provide short-term relief to prevent homelessness. Since then the HEP Fund evolved in part to an ongoing rent supplement. Payments during 2007 totaled $47 million. In 2008–2009, the Department issued $76 million in HEP Fund payments. The Government of Alberta discontinued the HEP Fund in April 2009, and replaced it with the direct rent supplement delivered by management bodies through the Ministry of Housing and Urban Affairs. The Department continues to administer emergency damage deposit and eviction prevention through its Income Support program.

Why it is important to Albertans

Albertans want to be confident that emergency programs such as HEP provide funds to only those for whom the programs are designed. Further, Albertans expect that the Department will identify and appropriately deal with any abuses of public resources.

What we found

Policies were not
always followed

The Department had systems and resources to assess an applicant's eligibility, manage payments and deal with cases of suspected abuse under the HEP Fund. However, we found that policies were not always followed and that some processes could be improved.

The following observations are specific to our audit of the HEP Fund, which has been discontinued. Therefore, these observations did not result in recommendations. Nevertheless, these observations may be applicable to future programs launched under similar circumstances. Following these observations about the HEP Fund, we make two recommendations about the Department's operations.

The Department staff who administered the HEP Fund Program:

No new staff hired
for program

- used existing information systems effectively to process payments. Management informed us that no new staff were hired to administer the program.
- did not always follow Department policy when determining eligibility for HEP Fund benefits. In some cases, staff approved applications and made payments without adequate documentation evident on files.

Segregation of
duties was weak

- did not use a payment system that segregated their duties for processing one-time HEP Fund payments. Without other compensating internal controls, a fraudulent payment could have been generated.

The following observations are the subject of our recommendations in this report. The Department:

Investigation units need better guidelines

- has a mechanism to deal with suspected cases of fraud and abuse. However, the Department lacks clearly defined guidelines for its investigation units and lacks criteria for determining when to pursue a fraud case.

Internal audits again found lack of support

- conducted an internal audit in September 2007 in response to alleged fraud by HEP Fund recipients. One of the key findings from this audit was the lack of support documentation in 51 out of 239 files sampled. In January 2009, internal audit found similar results in a second audit.

Augment random sampling

- conducts home visits using randomly selected samples. The Department does not augment this methodology with samples based on potential risk or unusual circumstances.

What needs to be done

Although we make no recommendations about the HEP Fund, some of our findings apply as well to other operations of the Department. Accordingly, we identified two areas where we believe the Department could improve its processes:

Guidance needed for investigative units

- The Department should improve the processes of its investigation units by defining clear objectives and establishing criteria for determining when to undertake a full fraud investigation. The Department should also develop fraud-specific training programs for investigative staff.

Responding to internal audit findings

- The Department should develop detailed plans and set timelines for reducing types of errors and resolving non-compliance matters identified during internal audits. The Department should also develop a risk-based approach to select samples for internal audit and for random home visits by the investigation unit.

Audit objectives and scope

The objectives of this audit were to determine if the Department had systems to:

- assess the eligibility of HEP Fund applicants
- ensure that staff made HEP Fund payments in accordance with its policies and procedures
- identify and deal with suspected abuse of the HEP Fund

To perform the audit we:

- examined policy and procedures
- examined processes and files at two service centres: one urban and one rural
- examined processes and files at two fraud investigation units: one urban and one rural
- interviewed staff at these regional offices and fraud investigation units

- assessed the processes internal audit uses to conduct ongoing investigations of the program

Background

Assistance to Albertans in need

In 2007, the Alberta Affordable Housing Task Force recommended introducing a Homeless and Eviction Prevention Fund to assist low-income Albertans who were at risk of losing their homes due to rent increases or rent arrears, as well as to help those who needed support to establish a new residence.

The Department of Employment and Immigration began delivering the HEP Fund program on behalf of the (then) Ministry of Municipal Affairs and Housing on May 11, 2007.

Internal audit conducted in 2007

In 2007, the media reported allegations that individuals were abusing the HEP Fund by presenting inadequate and fraudulent documentation for rent increases, eviction notices and utility arrears, and that Department staff were not taking sufficient steps to verify the authenticity of claims. On July 18, 2007, the (then) Minister of Employment, Immigration and Industry asked the Department's internal auditors to review the administration of the HEP Fund to ensure accountability for the program's procedures.

HEP Fund program

Payments to renters increased

Albertans who were 18 years old or over, at risk of being homeless, and without available financial assets, could apply for assistance from the HEP Fund. In 2007–2008, the Department issued $47 million in payments under this program. Payments for 2008–2009 were $76 million.

Assistance under this program included the payment of rent arrears, rent shortfall or funds for new residents to establish a rental residence in Alberta. Caseworkers at the Department's regional offices assessed whether an applicant was eligible to receive HEP Fund assistance. The Department did not hire additional caseworkers or other staff to administer this program.

In July 2008, the Department issued direction that rent shortfall payments were not a core benefit and were therefore, not to be used in determining someone's eligibility for Income Support. Management developed other policies such as not requiring recipients to reapply for ongoing rent supplement payments, but still requiring them to maintain contact with their caseworker.

Cap placed on rent subsidy

In November 2008, management introduced a limit of $1,000 on payments that staff could make without supervisory approval. Management also set a maximum limit on how much rent subsidy could be paid. This amount was based on average published rents in an area. Before this, the full amount of the

applicant's rent could be used to calculate the subsidy. The rent subsidy was also reduced by the amount of direct rent supplement that an applicant would be eligible for through other programs, based on the applicant's income.

Program became an ongoing supplement

The HEP Fund was initially established to provide short-term relief to Albertans at risk of becoming homeless. However, in substance it appears to have evolved into an ongoing supplement for Albertans who had recurring problems with making their monthly rent payments.

HEP Fund discontinued

The Department discontinued the HEP Fund in April 2009, and replaced it with the direct rent supplement delivered by management bodies through the Ministry of Housing and Urban Affairs. The Department continues to provide emergency damage deposit and eviction funds within its Income Support program.

Observations on the HEP Fund

We made the following observations during our audit. Due to the discontinuation of the HEP program, these observations do not include recommendations for improvement. Nevertheless, we provide the observations for management to consider in the event the Department launches a similar program in the future.

No new staff hired

Using existing staffing and resources

The Department informed us that they did not hire any additional staff to administer this program. The Department effectively used its existing information systems to process payments and developed separate data input codes to separate HEP benefits from other payments.

Caseworkers who suspected abuse of the HEP Fund advised the Department's fraud investigation unit of their concerns.

Investigators follow up on suspected abuses

Investigations

The Department's fraud investigation units follow up suspected program abuse based on complaints from caseworkers or information provided by the public. All investigators are peace officers with the authority to lay fraud charges under the *Criminal Code*[1] and gather evidence through such channels as seeking a production order[2].

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[1] R.S.C 1985, c.C-46

[2] Under Section 487.012 of the *Criminal Code*, this is an order by a justice or judge to a person, other than a person under investigation, to produce or prepare certain documents within a time frame as specified in the Order.

Investigators also conduct onsite visits to verify information provided by benefit recipients or to follow up on suspected cases of financial abuse. The Edmonton Investigation and Review Unit also initiates and conducts random onsite visits to verify occupancy and landlord information contained in selected case files.

Internal audit

In September 2007, the Department completed its internal audit on the HEP Fund and issued a report. To improve processes, the report recommended, and management agreed, the Department should:

- obtain adequate documentation from applicants
- issue new directives to clarify how staff should coordinate benefits
- conduct random checks on recipients' rental accommodation
- implement a process to ensure that applicants are not also receiving other rent supplement benefits such as the direct rent supplement program administered by Housing and Urban Affairs
- develop a separate recovery process for HEP Fund overpayments

Evolution of the program

The HEP Fund was intended as short-term support to provide emergency relief to Albertans who faced eviction or homelessness. Initially, management provided staff with relatively simple guidelines on how to deliver the program.

In September 2007, an internal audit recommended that the Department clarify how staff should coordinate benefits between the Department's Income Support and HEP programs. Internal audit identified that the Department needed clearer procedures to allow staff to confidently determine which of the two programs should assist the applicant.

Ensuring staff follow policies and gather adequate information from applicants

Department policies require staff to obtain proper documents to support applications before making payments. This policy was not consistently followed.

To obtain HEP Fund benefits, applicants were required to provide support documentation, such as:

- personal identification
- confirmation from a landlord indicating significant rent arrears or an eviction notice
- confirmation that the applicant did not have sufficient financial resources

No evidence that
staff obtained
required
documentation

Key to this application process was that applicants must establish their identity. In 25 out of 50 files we examined, there was no evidence in the case file that the caseworkers obtained the identification required by the Department's policy.

The amount of the eviction benefit payment was based on the amount of arrears stated in an applicant's eviction notice. In six out of 24 files we examined for which the Department paid an initial eviction benefit, there was no eviction notice in the file to support the payment.

Case files did not demonstrate that the Department gathered adequate information from applicants. For example, the Department did not require independent documentation of a request for a new resident benefit, such as a copy of a proposed lease, proposed rent charges or a tenancy agreement. We also found that in five out of 39 files reviewed for which the Department paid a new resident benefit, there was no documentation to substantiate the amount requested.

Risk of paying
excess funds

Without full, relevant and pertinent information from the applicant, and without documentation to support the amount paid, the Department might be paying excess funds. For example, recipients might have received benefits for which they were not eligible or might have received payments in amounts that were incorrect.

Designing adequate internal controls

Payments could
be processed
without
supervisory
approval

The Department required that a supervisor review all payments over $1,000. However, the automated payment system did not support this policy: staff were able to process and make payments without supervisory approval.

Risk of fraud from
lack of
segregation of
duties

A HEP Fund applicant who was not on Income Support was required to meet with a Career and Employment Consultant. These applicants may only have needed to access the HEP Fund once. From July 2007 to December 2008, the Department issued $18.3 million in payment to applicants who were one-time HEP Fund recipients. Each Career and Employment Consultant would be responsible for:

- assessing the applicant's initial eligibility
- processing and approving the application for HEP assistance
- ensuring the applicant provided all required supporting documentation
- initiating a payment using the Local Income Support Application system
- closing the applicant's file

Files were not reviewed by a second party before the Department issued payment or before the Career and Employment Consultant closed the file.

No evidence staff
misappropriated
funds

We found no evidence of funds misappropriated due to this lack of segregation of duties. However, there was increased risk to the Department. Employees have opportunities to generate fraudulent payments if there are no preventative controls in place. Controls such as segregation of duties would mitigate the risks of having the same person assess an applicant's needs, initiate and process the payment, and then subsequently close the file.

Recommendations
1.1.1 Fraud investigation processes
Recommendation

We recommend that the Department of Employment and Immigration improve the processes of its investigation units by:

- **defining clear objectives for investigation units**
- **establishing guidelines for determining when they should undertake a fraud investigation**
- **providing fraud-specific training for investigation unit staff**

Background

Investigative units
in six regions

The Department has investigation units in each of its six regions. These units initiate investigations when they receive complaints from Department caseworkers or information from members of the public. The Edmonton unit has four investigators assigned to HEP Fund cases. They had approximately 80 open HEP Fund investigations files at the time of our audit. Two investigators in the Central Region had 12 HEP Fund cases in their caseload. In addition to HEP cases, these units investigate alleged abuses of other Departmental programs. An investigation that results in enough evidence to lay fraud charges can take months to complete.

Several ways a
case can be
concluded

An investigation may be concluded, and the file closed, if:
- there was no proven abuse of funds
- evidence of abuse was found, but it was insufficient to pursue criminal charges
- the dollar amount involved was materially insignificant to pursue criminal charges
- there was enough evidence to pursue criminal charges, but other circumstances resulted in a decision not to follow this course of action
- enough evidence of fraud was found and prosecution was pursued

Dealing with Fund
abuse

The Department has several courses of action available to deal with misuse of the Fund. Depending on the evidence available, the Department can:
- request repayment of the funds by assessing an overpayment or entering into a repayment agreement

- recommend to the Crown that the person be placed in the Adult Alternative Measures Program[3]
- pursue a criminal prosecution

Recovering overpayments

The Department recovers overpayments at a maximum rate of $20 per month if the recipient is also receiving Income Support. If the recipient is not on Income Support, the Department enters into a repayment agreement. There is no "cap" on how much in overpayments can be assessed or allowed to accumulate against each HEP recipient.

Criteria: the standards we used for our audit

Decisions to pursue fraud charges should conform to established guidelines and be based on the results of investigation.

Our audit findings

Each region has own investigative processes

Each region has developed its own processes to track and assess incoming complaints and assign investigations. Each investigation unit conducts an initial review of the information they receive to assess the validity of the complaint. If an investigation is to be undertaken, management assigns an investigator, who opens a file. Investigators submit a report of the investigation results for their supervisor's review and approval. The report is included in the recipient's file to help caseworkers assess whether to issue a future payment.

No guidelines for breadth of investigations

Evidence of overpayment can usually be found early in the investigation. Investigators require much more time and effort to conduct a full investigation suitable for taking a case to court. The Department does not have guidelines for determining when to undertake a fraud investigation. For example, the Department may consider guidelines such as:

- a minimum value of suspected fraud before initiating an investigation
- what to do if the suspect has left the jurisdiction
- how to weigh the impact of a suspect's personal circumstances or previous criminal behaviour
- direction for when and how investigators should consult with the Crown prosecutor
- circumstances under which to recommend the Adult Alternative Measures Program

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[3] The Adult Alternative Measures Program is offered to first- and second-time adult offenders charged with certain minor offences. Instead of having to go to court, if the offender accepts responsibility for what they have done and agrees to participate in alternate measures. They enter into an agreement that stipulates what they must do to satisfy program requirements. Successful completion of the program ensures the person does not end up with a criminal record. Refer to http://www.justice.gov.ab.ca/criminal_pros/default.aspx?id=5648 for a detailed description of this Program.

We examined 38 investigation files related to the HEP Fund and found:

Three common themes to investigations

- Common themes investigated included individuals who collected benefits but were not living at the claimed residence, HEP benefits not spent on rent and fraudulent documents provided to claim benefits.

Assessing overpayments could be done more effectively

- Investigators were conducting full investigations without clear guidance on whether the Department would pursue fraud charges if they found enough evidence. As a result, we saw evidence that investigators spent considerable time and effort on full investigations to assess an overpayment, which may have been done much earlier in the process.

Suspect's personal circumstances considered

- A full investigation takes an average of 2.8 months[4] and includes recording third-party statements and obtaining corroborating evidence. After a full investigation, management decides whether to pursue fraud charges, considering a suspect's personal circumstances and the future impact of a potential fraud charge. Such information is often available early in the investigation.

Criminal charges laid in two of 38 investigations

- In all 38 files we examined, investigators completed a full investigation. In 31 files, they assessed an overpayment. Criminal charges were laid in two cases.

Adult Alternative Measures Program not considered

- We found no evidence that the investigation units considered requests to the Crown under the Adult Alternative Measures Program as a possible conclusion to a case.

Training

Limited fraud-specific training available

Fraud investigations can be complicated; they require specialized training. Investigators at the two regional offices we visited have taken the program to become peace officers. The Department also has a general training plan for them. However, the Department has not determined which fraud-specific courses should be available or mandatory. Examples of specific fraud training include investigative techniques, interpretation of banking records, and criminal and case law in relation to fraud.

Implications and risks if recommendation not implemented

Without clear direction as to the role and priorities of investigation units, the Department may not be making effective use of these units. Inconsistent practices among investigation units will also increase the risk of regional differences in how cases are investigated and concluded.

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[4] This average is based on the investigation times of the sample of 38 investigation files we examined at the two fraud investigation units.

1.1.2 Internal audits and home visits

Recommendation

We recommend that the Department of Employment and Immigration improve its processes by developing:

- **timelines and strategies to respond to findings arising from internal audits**
- **a risk-based approach to augment the random sample selection method currently used for internal audits and home visits**

Background

Internal audit's role

The role of internal audit is to examine internal controls and test compliance with the Department's policies and procedures. If staff suspects fraud, they transfer the case to the investigation unit. The investigation unit also conducts random home visits to confirm the residency of the recipient.

Criteria: the standards we used for our audit

The Department should use a risk-based approach to conduct internal audits.

The Department should have a plan to implement internal audit's recommendations, which should include a timeline for action. Effectiveness of the action plan should be evidenced by a reduction in errors based on reoccurring internal audit results.

Our audit findings

Some progress on 2007 internal audit recommendations

In September 2007, the Department's internal audit team conducted an internal audit of the HEP Fund in response to alleged fraud by some recipients. One of internal audit's findings was that documentation to support the payments made was not complete. Management took some steps to implement internal audit's recommendations. For example, management further refined its directives and procedures for the HEP Fund and asked the investigation unit to conduct random home visits in Calgary and Edmonton.

2009 internal audit found similar issues

In January 2009, the team completed a second internal audit, testing 10 HEP Fund files from each of the six regions. Internal audit again found that HEP Fund recipient files did not contain adequate documentation. In five of the six regions, at least one and up to three of the 10 regional files tested by internal audit did not contain adequate support documentation. The regional directors agreed with the findings, but did not provide a specific timeline or plan for improving the results.

Random home
visits to verify
information

Some investigation units also conduct random home visits. The purpose of these visits is to verify occupancy and landlord information contained in selected HEP Fund client files. In Edmonton, two staff members from the investigation unit conduct 50 visits a month.

Need to choose
samples
effectively

The Department uses random sampling to select samples for its internal audits and home visits. The Department does not consider risk or unusual transactions in its sample selection. A more effective approach would be to also select samples based on identified risks or anomalies, such as:

- rental location does not agree to the mailing address
- required data, such as SIN or date of birth, is missing
- multiple recipients have the same address
- high dollar or long-term payments

Implications and risks if recommendation not implemented

Home visits and internal audits may not be as effective or efficient if the Department does not identify areas of risk and does not develop strategies to reduce instances of non-compliance.

1.2 Capital asset policy—implemented

In our *2006–2007 Annual Report* (vol. 2—page 58), we recommended that the Department improve its capital asset policy and procedures.

The Department implemented the recommendation by:

- developing an updated capital asset policy that provides adequate guidance to staff for the capitalization of assets, systems development costs and upgrades
- appropriately applying its new policy

1.3 Debit cards—changed circumstances

In our *2006–2007 Annual Report* (vol. 2—page 57), we recommended that the Department improve controls to prevent duplicate Income Support payments to the same recipient—by both cheque and debit card.

Effective April 1, 2009, the debit card pilot project for issuing benefits was stopped. The vendor was not able to fulfill the requirements of the request for proposal due to system security concerns of its partner. Province-wide implementation will be revisited sometime in the future.

2. Workers' Compensation Board (WCB)

2.1 Claims audit

Recommendation

We recommend that WCB assess whether it is conducting sufficient claims audits each year.

Background

WCB audits employer claims

WCB's Claims Audit group conducts audits to ensure that Alberta employers comply with WCB legislation and have an effective claims management program. Their audit procedures include a review of documents and interviews with front line employees.

The main objective of a claims audit is to educate employers and to help them establish effective programs for recording and reporting accidents, meeting worker entitlement responsibilities and managing return to work processes.

Audits target high risk employers

In 2008, 60 large employers, representing approximately 12% of all claims, were audited. The selection was based on risk and included employers registered in the Partners in Injury Reduction Program, employers who do not report accidents within three days, employers with high claims costs and high duration days, employers with a low modified work percentage or employers who are referred to Claims Audit by other WCB groups.

Criteria: the standards we used for our audit

WCB should periodically assess the adequacy of its audit programs.

Our audit findings

WCB's claims audit process works well. However, their test results indicate that reporting by employers considered high risk is not accurate, complete or timely. For these employers, a process is in place to improve reporting.

Could more employers benefit from a claims audit

WCB completed 120 claims audits on high-risk employers for January 1, 2007 to October 31, 2008. The test results indicated that 66% passed the accident recording tests, 10% passed the accident reporting tests, 62% passed the worker entitlement tests and 8% passed the overall audit. The low overall employer pass rate of 8% indicated WCB's success in targeting employers who need education and a possible need to target more Alberta employers.

Implications and risks if recommendation not implemented

Additional employers who could benefit from a claims audit will not be identified.

2.2 Access and security monitoring

Recommendation

We recommend that WCB formalize its security monitoring procedures to ensure that security threats to critical information systems are detected in a timely manner.

Background

The protection of information assets is typically controlled through limits to user access. Monitoring and logging access to critical systems and information helps ensure that access controls are working.

IT security threats need monitoring

Most information security devices and business applications today have security features that can log and report all levels of events and activities. Information relating to user access, such as user identifier, time and type of access, identification of terminal used, and the application used to gain access, can be logged for the detection of security threats. Continuous monitoring of such logs allows management to promptly take corrective actions to resolve inappropriate access or security violations. Log management tools can also be used to automate the notification and reporting process.

Criteria: the standards we used for our audit

WCB should have documented effective control processes to monitor and log information security and access violations, and to ensure that its network operating systems, applications and other security devices are configured to prevent unauthorized access. Such processes should also address how management should report and remediate security violations.

Our audit findings

Access violations not actively monitored

WCB does not have documented processes to monitor and respond to security violations. Management reviews security logs and escalations on an ad hoc basis only, without a predefined control process to assess the level of risk or impact of the threat.

Implications and risks if recommendation not implemented

Failure to actively monitor security and access violations can allow an intruder to probe for possible weaknesses or entry points to WCB's critical financial information systems. Unauthorized internal users may gain access to WCB's financial applications and modify or delete data, resulting in misstated financial statements.

2.3 Enforce procedures and guidelines for purchasing card program—implemented

Background

Last year (*October 2008 Report*, page 253), we recommended that WCB enforce its procedures and guidelines for the purchasing card program by ensuring that all purchasing card reports are appropriately approved and have supporting documentation.

Our audit findings

Improved
processes

WCB implemented the recommendation by improving its processes to monitor and follow up on instances of non-compliance with purchasing card program procedures and guidelines.

WCB's Corporate Services group has increased the number of purchasing card statements it tests each month. It now reports the results of the testing to the cardholder, coordinator and supervisor, together with the action the cardholder must take to resolve the discrepancy. When non-compliance is found, Corporate Services continuously monitors the cardholder for an additional two months. Management Audit Services also performed quarterly tests of selected purchasing card transactions. Both Corporate Services and Management Audit Services prepare a quarterly memo to senior management, summarizing the audit findings from the testing of purchasing cards and including any concerns or required actions.

Financial statements

Unqualified
auditor's opinions

Our auditor's opinion on the Ministry financial statements for the year ended March 31, 2009 is unqualified.

We issued an unqualified audit opinion for the March 31, 2009 Labour Market Development Claim.

We issued an unqualified audit opinion for the March 31, 2008 Employability Assistance for People with Disabilities Claim.

We issued an unqualified audit opinion on the financial statements of WCB for the year ended December 31, 2008. We also issued an unqualified audit opinion on the schedule of administrative charges of WCB for the year ended December 31, 2008.

Performance measures

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

We found no exceptions when we completed specified auditing procedures on WCB's performance measures in its accountability framework.

Energy
Summary

The Department of Energy should:

- improve its monitoring of the implementation of the bitumen valuation methodology—see below
- improve processes to prepare its financial statements—see page 197
- improve controls over the revenue forecast system—see page 199
- monitor the impact of the change in the provincial corporate effective royalty rate on the Department's accounts receivable and incentive programs see page 200

Due to changed circumstances, our 2003–2004 recommendation relating to the administration of the oil sands Royalty Regime is no longer valid—see page 201

On page 204, we also describe an emerging financial reporting issue relating to the incentive programs announced by the Ministry in March 2009

The Energy Resources Conservation Board (ERCB) should assess the adequacy of its SAP business application access and security controls and configurations to ensure ERCB's information is properly protected—see page 202

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Our audit findings and recommendations

1. Department of Energy
1.1 Bitumen valuation methodology implementation

Recommendation No. 20
We recommend that the Department of Energy improve its monitoring of the implementation of the bitumen valuation methodology.

Background

Bitumen requires valuation process

Some oil sands projects produce heavy oil, but effective January 1, 2009, the majority of oil sands royalties are determined based on the value of bitumen. Bitumen is not widely traded like crude oil, and some producers use almost all of the bitumen they produce to make synthetic crude oil and other upgraded products within their operations. This combination makes it necessary to establish a method for determining the fair market value of bitumen to determine royalties.

Royalty amending agreements include process to value bitumen

Suncor and Syncrude oil sands mine projects are assessed royalties under Crown agreements that were made before the creation of the oil sands royalty regulation that applies to other oil sands projects. In 2008, the Ministry agreed to amend the Crown agreements with both Suncor and Syncrude through the Royalty Amending Agreements (RAAs). Each of these RAAs contemplated the implementation of a bitumen valuation methodology and each contained a list of clauses modifying the application of the to-be-established bitumen valuation methodology to the respective Crown-agreement projects. In January 2009, the *Bitumen Valuation Methodology (Ministerial) Regulation*[1] was implemented which applies to all oil sands projects that have significant quantities of non-arms length transfers of bitumen to upgrading operations.

Criteria: the standards we used for our audit

The Department should have a process to monitor the implementation of the bitumen valuation methodology.

Our audit findings

Bitumen price determined by one operator less than half that used by all others

In late March 2009, while reviewing reports received by the Department from the oil sands operators for the 2009 calendar year, we noted that the bitumen price used by one of the Crown-agreement operators was less than half that used by all other operators. Using a lower price decreases net operating results and royalties calculated on that base. Although the oil sands branch's staff had also noted this variance, they were unable to reconcile their expectation of the bitumen price for that project to the operator's price. Upon further inquiry, we were informed by the Department that the operators had notified them by letter in February 2009, that their calculation was based on the terms of the RAA, including the qualifications contained in that agreement. However, the Department is of the view that the BVM is as set out in the *Bitumen Valuation Methodology (Ministerial) Regulation,* which is fully consistent with the qualifications set out in the RAA.

Outcome of bitumen valuation issue could have significant impact on royalties

Management sent formal requests to the two oil sands operators in mid-April 2009, asking them to amend the bitumen values used in the good faith estimates. The oil sands operators have amended their good faith estimates as requested, pending resolution of the matter. The RAAs include a dispute resolution process. Although this issue did not have a significant impact on royalties accrued to March 31, 2009, the outcome could have a significant impact, estimated to be $100 million, on the amount of royalties assessable for the 2009 calendar year. This issue had not yet been resolved at the time we completed our audit.

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[1] Alta. Reg. 232/2008

Implications and risks if recommendation not implemented

Differences in interpretation between the Department and oil sands operators of the bitumen valuation methodology may not be identified and resolved in a timely manner.

If the Department is unsuccessful in upholding their interpretation of the bitumen valuation methodology applicable to Crown agreements, this could result in significantly less royalty to the Crown for the duration of the RAAs.

1.2 Improving processes to prepare financial information

Recommendation

We recommend that the Department of Energy improve:

- internal communication processes between the Finance branch and program staff
- quality control processes for the preparation of working papers and financial statements
- the timely completion of accurate financial information

Background

Energy's accounting is significant to the Government of Alberta's financial statements

For the year ended March 31, 2009, the Ministry of Energy is reporting approximately $12 billion in revenue primarily, from non-renewable resources. Systems are in place to both compile and internally report on forecasted and actual revenues so that management can make timely decisions. Also, the Ministry reports its revenues publicly in its financial statements. These amounts are also consolidated into the Government of Alberta's financial statements. The Department of Treasury Board has implemented internal reporting deadlines that apply to all Departments so that the government's financial statements can be prepared, audited and reported on within the legislated deadline of June 30.

Criteria: the standards we used for our audit

The Department should have processes to ensure complete, accurate and timely financial information is available.

Controls over financial reporting processes should exist to reduce the risk of material misstatements in the Department's accounting records.

Our audit findings

Sharing of information between program areas and the finance branch

When issues arise, such as changes in systems or differing interpretation of legislation, they usually have implications for aspects of the Ministry's budget forecasts and financial reports. Improved processes are needed to ensure that

issues are communicated to the Department of Energy's Finance Branch in a timely manner.

Examples from the current and recent financial statement audits include:

Accounting implications of royalty issues are not always considered in a timely manner

- The change in the royalty regime required a one-time royalty adjustment calculation pertaining to December 31, 2008, ending oil sands inventory balances. The effect of this adjustment needed to be incorporated into the Ministry's oil sands accrual, but the Oil Sands Branch did not realize this so the information was not communicated to the Finance branch in a timely manner.
- Certain oil sands companies have interpreted the bitumen valuation methodology differently than the Department. This too impacted the current year accrual and has the potential to have significant impacts on future revenue forecasts, but it was not communicated to the Finance branch by the program area as an item to be considered in preparing the Ministry financial statements. (We discuss this issue further in section 1.1)
- The fuel gas issue, previously reported in our *October 2008 Report*, was not reported by the program area to the Finance Branch to assess whether the natural gas accrual required an adjustment. The Finance Branch became aware of the matter after we noted it.
- A working paper prepared by a program area and submitted to the Finance Branch to support key accruals contained a material error of $75 million.

Quality control processes over working papers and financial statements

Significant errors found

A key process in preparing the Ministry financial statements, is making several routine and non-routine journal entries to record revenue completely and accurately. In each of the last three years, there has been at least one material adjusting entry omitted or duplicated during the preparation of the financial statements. Although these errors are few in occurrence, they are individually material ranging from $60 million to $237 million.

Reporting deadlines not met

The Department has not been able to provide complete draft financial statements and supporting working papers of sufficient quality within the year-end deadlines established by the Department of Treasury Board for at least the last three years. Although the financial statements and working papers are eventually completed, combined with the issues noted above, this compounds the risk of errors not being detected by management in a timely manner.

Implications and risks if recommendation not implemented
Management may not identify material errors or omissions in their financial statements.

1.3 Sustaining the continued accuracy of the revenue forecast system

Recommendation No. 21

We recommend that the Department of Energy improve the controls and documentation supporting the revenue forecast model to help ensure the continued accuracy of the forecast system.

Background

Forecast model used for budget and financial statements

The Department has developed a complex forecasting system for royalties, freehold mineral tax, rental revenues and land sales that is used for budgeting purposes. The natural gas and oil sands forecasts are also used to calculate the most significant accruals for the financial statements. The forecast model and supporting data are updated and maintained by a few key people in the Department's Finance Branch. The data is gathered and uploaded into Excel spreadsheets where the key forecast calculations occur.

Criteria: the standards we used for our audit

The extent of documentation and control over end-user applications, such as Excel, should be commensurate with the complexity and impact on the financial statements.

Our audit findings

We reviewed a December 2008 document titled *Revenue Forecast Model Documentation* that outlines the process, methodology and forecasting techniques used in modeling the various revenue streams. We also examined the controls and processes around the development and maintenance of the forecast models, and assessed the documentation that outlines the forecasting methodology.

Documentation requires more depth

Although the current systems documentation prepared by the Department provides a starting point to understanding the forecast model, it would not provide sufficient information for a new employee to process and maintain the model if it became necessary.

Our examination of the documentation and controls for the forecast found:

Key processes need to be improved

- a documented process for making changes to the forecast models does not exist
- a defined process for tracking changes made and regularly updating the methodology documentation for those changes does not exist
- strong controls to prevent the input of inaccurate data does not exist
- clear and specific documented support does not exist for a number of the assumptions made within the models, such as number of years to use for historical averages and application of seasonal trends

- much of the logic and reasoning around many assumptions reside with the individuals who prepare the models and is not documented

Based upon our examination of the accuracy of the forecast models used for the year end accruals, we did not identify any mathematical errors. However, with increased price sensitivity of royalties under the "new" royalty regime, and changing assumptions, there is an increased risk of misstatement going forward if assumptions and methodologies are not clearly documented and well supported.

Model depends on staff continuity

Because of the small number of individuals that work within the forecasting group, without clear and comprehensive documentation of the models, any changes to staff continuity could result in knowledge and understanding of the models being lost. This could potentially have an impact on the accuracy of future budgets and accruals within the financial statements.

Implications and risks if recommendation not implemented

Future employees may not be able to obtain sufficient knowledge to effectively process the forecast calculations or maintain the model if adequate documentation is not prepared by the current staff.

1.4 Corporate effective royalty rate

Recommendation No. 22

We recommend that the Department of Energy monitor the impact of the change in the provincial average corporate effective royalty rate on the Department's accounts receivable and incentive programs.

Background

Gas costs claims adjusted annually

Natural gas producers claim an allowance for capital, operating and custom processing costs. These monthly cost claims represent the Crown's share of the cost of producing and processing natural gas and reduce the net royalty payable by producers. Each June, natural gas producing companies are required to submit their actual costs from the preceding calendar year. Thus, in order for a company to include the cost allowances for a production month in the current year, an estimate is used. The estimate is based on the previous year's cost and the corporate effective royalty rate (CERR). Any differences from the cost estimates and the actual cost data submitted for a calendar year, is reflected as an "annual cost adjustment" in a company's royalty invoice from the Department the following June.

Criteria: the standards we used for our audit

The risks and impact of changing forecasts and conditions should be assessed and mitigated if necessary.

Our audit findings

Provincial average
royalty rate has
changed
significantly

We found that the Department made a significant adjustment to the gas accrual covering January to March 2009 related to the cost allowance. Based upon forecasted natural gas prices, the Department determined that the estimated provincial average CERR could be approximately 10% for the 2009 calendar year. During the preceding 10 years, the provincial average CERR had been relatively stable approximating 20%. The difference between these two rates is a result of the new royalty regime being more price-sensitive to lower natural gas prices than the old regime. The provincial average CERR is the average rate of royalties the Department realizes on natural gas royalties.

A significant
adjustment is
forecasted for
2009

Cost allowance estimates for 2009 are based on the higher 2008 CERR. The potential effect of basing the estimated cost allowance on the higher CERR may result in producers claiming allowable costs of approximately $1.1 billion in 2009, which may have to be paid back to the Department in June of 2010. Although there is always a settlement through the annual adjustment in the following June related to the gas cost allowances, the 2010 settlement is forecasted to be atypical in magnitude and direction of payment. An estimate of this settlement has already been included in the Department's accruals and forecasts, and therefore should not further impact the forecasted provincial deficit.

Implications and risks if recommendation not implemented

The cash flow impact on producers of the June 2010 cost allowance adjustment could have unexpected impacts on the Department's accounts receivable and royalty incentive programs.

1.5 Administration of the oil sands royalty regime—changed circumstances

Background

In our *2003–2004 Annual Report* (No. 10—page 125) we recommended that the Department of Energy:

- set expected ranges for analyzing the costs and forecasted resource prices submitted on oil sands project applications
- incorporate risk into its present value test used to assess project applications

In our *2004–2005 Annual Report,* we reported that the Department had implemented the first part of the recommendation by using a range of costs, prices, and production volumes when assessing oil sands royalty projects during the approval process.

Also, by our *2004–2005 Annual Report,* the Department had formed a task force that prepared a discussion paper dealing with the second part of our

recommendation to use a risk-adjusted discount rate in the present value test. When we followed up again and reported in our *2005–2006 Annual Report,* the Department had decided to use a weighted scoring system, instead of a risk-adjusted discount rate.

Our audit findings

The Department decided not to proceed with the weighted scoring system for assessing project applications because of the subjectivity in determining the numerical values for the weighted scoring system. We agree and are not carrying forward our recommendation.

2. Energy Resources Conservation Board
2.1 Assessing and improving SAP security controls

Recommendation

We recommend the Energy Resources Conservation Board assess the adequacy of its SAP business application access and security controls and configurations to ensure its information is properly protected.

Background

ERCB uses SAP—an integrated enterprise resource planning software application—to process and record financial and business information. As part of our financial statement audit, we reviewed SAP's access and security controls and configurations. We based our work on SAP information extracts obtained on February 16, 2009.

Criteria: the standards we used for our audit

ERCB should have adequate access and security controls and configurations within its SAP system to ensure that ERCB:

- does not allow any single user to have excessive access (excessive access is anything that would allow a user to bypass critical management controls)
- does not use the system's default security settings and configurations
- reviews user accounts regularly to confirm the user's business need and monitor the user's actions

Our audit findings

We observed that two people had excessive access that would allow them to bypass critical management controls. Their access would also allow them to hide their actions by modifying or deleting audit trail evidence maintained in the SAP system. We did not identify any well-designed compensating controls or mitigating circumstances for this risk.

The excessive access privileges of these two users included the ability to:
- make changes directly to or delete data and tables in the SAP production system
- create or delete users, give users the ability to do anything within SAP, and delete users and their recent activity

Our information extracts also identified weak security configurations. For example:
- SAP administrative accounts still had their default passwords enabled
- three default generic user accounts with powerful user access were still enabled
- these accounts were not locked and their passwords were not properly secured

In addition, the system does not log sensitive user actions; nor does ERCB monitor users' sensitive actions or regularly review user accounts for their business need. The ERCB did not enable the auditing and logging function within SAP. Therefore, actions taken by powerful account users cannot be independently reviewed to ensure they do not abuse the privileges they have.

Implications and risks if recommendation not implemented
Without proper access and security controls and configurations, unauthorized changes to, or deletion and use of ERCB's business data may occur.

Financial statements

Unqualified
auditor's opinions

Our auditor's opinions on the financial statements for the Ministry and the Department for the year ended March 31, 2009 are unqualified.

Our auditor's opinion on the financial statements for the Alberta Petroleum Marketing Commission for the year ended December 31, 2008 is unqualified.

Our auditor's opinions on the financial statements for the Alberta Utilities Commission and the Energy Resources Conservation Board for the year ended March 31, 2009 are unqualified.

Performance measures

Unqualified
review
engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Emerging issue—Accounting for the three-point incentive program for the energy sector

Background

On March 3, 2009, the Ministry of Energy announced a three-point incentive program to stimulate new and continued economic activity. The three parts of the program include:

- a drilling royalty credit for new oil and gas wells estimated to reduce royalties receivable by $466 million for one year
- a maximum 5% royalty on the first year of production from new oil and gas wells estimated to reduce royalties receivable by $1 billion for one year
- funds of $30 million directed to oil and gas well reclamation

The first two programs were extended an additional year on June 25, 2009. Since these programs begin April 1, 2009, the effect of these programs will be accounted for the first time in the Ministry of Energy's financial statements for the year ending March 31, 2010.

In the past, the Department has operated several royalty off-set programs such as the deep gas royalty holiday. These programs were accounted for in the Ministry's financial statements by netting them against the gross royalties that would have otherwise been calculated in absence of the programs. We accepted this accounting treatment because those programs were integral to the determination of royalties from the wells they were applied to. Described another way, those programs essentially modified the base royalty calculation to take into account some other key well characteristics such as depth for applicable wells.

We believe the new programs should be recorded as an expense in the Ministry financial statements rather than netting them against royalty revenues. The Department already plans to record the third point related to reclamation as an expense because it will take the form of a grant to the Orphan Well Association. However, the Department so far has indicated through its budget that it will record the first two incentives by netting them against royalty revenues.

Accounting implications

Programs should be accounted for as an expense regardless of form

Under existing Canadian public sector accounting principles, transactions should be presented in a manner that reflects their actual underlying economic substance rather than their legal form. Accounting principles also require that financial statements disclose the gross amount of revenue.

The drilling credit and new well incentives take the form of a direct reduction to royalties receivable and, therefore, will not require the Ministry to issue cheques for these amounts to producers. Despite this form, their economic substance is no different than an economic development or disaster assistance grant program that

other ministries provide to other industries where those ministries do not have industry sourced revenues to net the cost of the programs against. The Ministry's public statements indicate the incentives are designed to stimulate economic activity in the energy sector and are not attached to the royalty structure. The Department also indicated that the incentives are a means through the royalty regime to make up for a lack of financing available to producers due to the credit crunch. We believe such statements support our view of the programs being an economic development and assistance program as opposed to an amendment to the royalty regime and should be accounted for the same as all other economic or assistance programs the government operates. That is, to record the program amounts as an expense.

Difficult to determine if there are any incremental revenues

We considered whether the incentives will increase overall royalties by generating an increased volume of production through a lower royalty rate which could be used to support an argument that the incentives should be netted against revenue. Because the amount of incremental drilling and production generated due to the incentives is uncertain, it is difficult to determine that the incentives will result in incremental revenue. Furthermore, because the resources in this case are finite and prices for natural gas are at cyclically low levels, any increased production in the near term would more likely represent a shifting of production from future periods when prices recover, as opposed to truly incremental volumes that would have never otherwise been produced.

While the Department is planning to disclose gross revenues, they are planning to show the cost of this economic development and assistance program as a negative revenue line item as opposed to an expense. If the primary purpose of incurring this cost is to stimulate economic activity then its cost would be appropriately classified as an expense just as any other government program would be.

Next steps
We will continue discussions with management and consider the impact of recording the programs net of revenues in our auditor's report for the year ending March 31, 2010.

Environment

Summary

The Department should implement a system for obtaining sufficient financial security for land disturbances—see below

The Department has implemented:

- our recommendation to create a system to manage contaminated site assessment information in Alberta—see page 209
- our recommendation to implement processes to comply with the Ministry of Treasury Board's deadlines for completion of the Climate Change and Emission Management Fund's financial statements—see page 210

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Our audit findings and recommendations

1. Financial security for land disturbances—recommendation repeated

   We are repeating the recommendation for the third time because the Department could not confirm when a new program for obtaining financial security will be finalized and implemented.

   ### Recommendation No. 23—repeated

   We again recommend that the Department of Environment implement a system for obtaining sufficient financial security to ensure parties complete the conservation and reclamation activity that the Department regulates.

   ### Background

Need system to obtain sufficient financial security for land disturbances

   Under the *Environmental Protection and Enhancement Act* (*EPEA*)[1] the land used for such activities as mining must be reclaimed to its original state once operations end. To ensure that the operator performs all the necessary reclamation activities the *Act* requires operators to provide security based on the full cost of reclamation. The security is returned to the operator if the site is reclaimed, or forfeited if an operator fails to meet his obligations. In the latter case, the Department assumes the responsibility for site reclamation.

[1] R.S.A. 2000, c. E-12

In our *1998–1999 Annual Report* (No. 30—page 157), we first identified that the process for obtaining security was applied inconsistently and security may be inadequate.

In our *2000–2001 Annual Report* (No. 8—page 90), we recommended that the Department deal with the risks of inadequate security. We noted that there were some large land-disturbing industries (oil sands and coal mines) that were not providing security at full cost of reclamation and there was no model in place to determine what a sufficient amount of security other than full cost might be. These industries were negotiating with the Department to establish levels and types of security acceptable to both parties.

In our *2004–2005 Annual Report* (No. 31—page 180), we recommended that the Department implement a system for obtaining sufficient financial security to ensure parties complete the reclamation activity that the Department regulates. We noted that there were still many inconsistencies in how financial security was posted for oil sands and coal mines. Some sites posted security under prior legislation and that security has been continued under existing legislation. The result is that some sites had security based on production and not on the full cost of reclamation, as currently required by *EPEA*. Some sites used outdated information to determine their estimated full cost of reclamation. Some estimates did not include all required costs. As a result of these inconsistencies, the sufficiency of security for the completion of reclamation was not ensured.

Criteria: the standards we used for our audit

For us to consider our recommendation implemented, there must be evidence that the Department's system will result in sufficient security to ensure completion of conservation and reclamation by considering the following:
- nature, complexity and extent of activity
- probable difficulty of conservation and reclamation
- consistent application of conservation and reclamation standards

Our audit findings

The Department has not changed its approach to assessing and obtaining financial security for reclamation from operations such as oil sands and coal mines. In 2005–2006, a government–industry team led by the Departments of Environment and Energy prepared a proposal for a Mine Liability Management Program for cabinet review and approval. This program used a risk-based approach to calculate the security needed.

In 2007, the proposal for the new program was undergoing revisions prior to stakeholder consultation. The stakeholder consultation process took place in 2009 with a report expected in August 2009. This consultation process involved participation and input from Alberta Environment, Alberta Energy, Alberta Treasury Board, Alberta Finance and Enterprise, Energy Resources Conservation Board, and industry representatives. Consultation outcomes will not constitute a decision on the proposed program and no final solution appears imminent.

Implications and risks if recommendations not implemented

With the passage of time, the Department continues to be exposed to the risk of obtaining inadequate security for conservation and reclamation activity which may result in additional costs to the province.

2. Contaminated sites—implemented
Background

Although we use the term "contaminated site," it should be noted that the Department's information system includes sites at which contamination is not confirmed or has been remediated.

Under the *EPEA*, the Department is responsible for regulating contaminated sites throughout the province. The responsibility includes assessing, designating and approving site remediation activities.

In our *2005–2006 Annual Report* (No. 29—page 87), we repeated our recommendation, first made in 2003, that the Department implement an integrated information system to track contaminated sites in Alberta.

At the time of the present audit, the Department possessed records for approximately 9,000 sites with some level of environmental site assessment activity.

Our audit findings

System has been developed

The Department has implemented an electronic system to manage environmental site assessment information in the province.

All regions of province are contained in the system

The scanned documentation can be easily accessed by stakeholders and the public though the Environmental Site Assessment Repository (ESAR) at http://www.esar.alberta.ca. While ESAR provides access to most of the documentation in the files, some individual documents are only available upon request due to confidentiality reasons. ESAR alerts users when such documents are present.

The Department is presently developing an electronic application that will provide analysis and summary reporting of environmental site assessment information across the province. We have observed clear evidence of progress on this project.

In summary, we have concluded that our criteria have in substance been met.

3. Climate Change and Emissions Management Fund—implemented
In our *October 2008 Public Report* (No. 27—page 261), we recommended that the Department implement processes to comply with the Ministry of Treasury Board's deadlines for completion of the Climate Change and Emission Management Fund's financial statements. We also recommended that management prepare the Fund's financial statements on an accrual basis.

Our audit findings
The Ministry implemented this recommendation. Both the 2007–2008 and 2008–2009 financial statements were prepared on the accrual basis and the Department met the deadline.

Financial statements

Unqualified auditor's opinions

Our auditor's opinions on the financial statements of the Ministry and the Department for the year ended March 31, 2009 are unqualified.

Our auditor's opinion on the financial statements of the Climate Change and Emissions Management Fund for the two years ended March 31, 2009 is unqualified.

Performance measures

Unqualified review engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Executive Council

Past
recommendations

For any outstanding recommendations previously made to Executive Council, please see our outstanding recommendations list on page 335.

Financial statements

Unqualified
auditor's opinion

Our auditor's opinion on the Ministry's financial statements for the year ended March 31, 2009 is unqualified.

Performance measures

Unqualified
review
engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Finance and Enterprise
Summary

Department

The Department should:
- improve its quality control review process for the Ministry annual report—see page 214
- have signed contract agreements in place before goods or services are supplied—see page 216

The Department has implemented the following recommendations:
- our 2008 recommendation to develop a process to ensure complete, accurate and timely recording of Alberta Heritage Scholarship Fund donation revenue see page 218
- our 2008 recommendation to work with its service provider to ensure that payroll bank reconciliations are promptly prepared and reviewed—see page 218
- our 2005–2006 recommendation to assess the costs and risks associated with Supplementary Retirement Plans (SRPs)—see page 219

ATB

Alberta Treasury Branches should:
- ensure its control objectives have been met before the core banking project is complete—see page 219
- develop a process to ensure its business units adopt and follow an organization-wide IT governance and control framework—see page 222
- strengthen its processes for confirming it complies with the Outsourcing Guideline—see page 226
- improve its service provider control monitoring processes—see page 227

Alberta Treasury Branches has implemented the following recommendations:
- our 2006–2007 recommendation to implement an effective organization-wide IT control framework—see page 224
- our 2004–2005 recommendation to ensure its branch processes comply with corporate policies and procedures (originally made in 1999–2000, subsequently repeated four times)—see page 229
- our 2002–2003 recommendation that management ensure its lending practices comply with Alberta Treasury Branches policies and procedures (repeated twice)—see page 229
- our October 2008 recommendation that management improve controls for capturing non-consumer risk ratings in Synergy—see page 229
- our 2006–2007 recommendation to annually validate the general loan loss allowance model against actual loss data and modify the model based on the results—see page 229

AIMCo

Alberta Investment Management Corporation should:

- re-establish an internal audit group—see page 232
- establish a process to estimate current market values for private and hedge fund investments—see page 233
- work with the Department to ensure timely recording of financial statement accounting adjustments and co-ordination of private investment valuation changes—see page 235
- improve its processes to achieve increased efficiency in its own financial reporting—see page 236

Alberta Investment Management Corporation has implemented the following recommendations:

- our 2008 recommendation to resolve conflicting job responsibilities of its Chief Internal Audit and Compliance Officer—see page 239
- our 2008 recommendation to improve its processes for setting up and maintaining approved counterparties in the swap database system— see page 240
- our 2008 recommendation to improve its investment performance information review processes—see page 240

ACFA

Alberta Capital Finance Authority has implemented our 2008 recommendation to extend deadlines for finalizing financial statements and completing the financial statement audit—see page 241

ASC

Alberta Securities Commission has implemented our 2008 recommendation to clarify its purchase policy to ensure it complies with TILMA—see page 241

Past recommendations

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Our audit findings and recommendations

1. Department of Finance and Enterprise
1.1 Quality control process over review of information in the annual report
Recommendation
We recommend that the Department of Finance and Enterprise improve its quality control review process over the financial statements information in the Ministry annual report.

Background

The *Alberta Finance 2007–2008 Annual Report* includes 31 sets of financial statements for the entities that comprise the Ministry of Finance and Enterprise. The Auditor General audits 30 of these entities; a public accounting firm audits the Alberta Insurance Council's financial statements.

Criteria: the standards we used for our audit

Financial information reported in the Ministry's annual report should be accurate and complete. Good business practices for reporting and reviewing financial information include a final independent review of the financial information to ensure that it is accurate and complete.

The *2007–2008 Ministry Annual Report Standards* (section D) indicated that a draft annual report should be submitted to our Office by July 11, 2008. This draft annual report should essentially be a final report which has been subjected to quality review within the Ministry.

Our audit findings

During our review of the Ministry's 2007–2008 draft annual report, we identified several errors that were not detected during the ministry's quality control review process. Some of these errors were replicated in the blueline version of the annual report. Weaknesses we identified include the following:

- The "Auditor General of Alberta" word mark appeared on the auditor's report to the Members of the Alberta Insurance Council. The Auditor General is not the auditor for this entity. This auditor's report was issued by a public accounting firm. In addition, this auditor's report was not dated.
- In several cases, the wording in the auditor's reports differed from the wording in the official auditor's reports we issued to entities. Words were incorrectly substituted, omitted or inserted.
- In some cases, the dates in the auditor's reports were changed. For example, although the official auditor's report to shareholders of Gainers Inc. was signed on December 20, 2007, the version in the Ministry's annual report was dated May 16, 2008. In addition, the year end date in the annual report version was reported as March 31, 2008 although the actual year end date was September 30, 2007.
- In several cases, the financial statements and notes contained replication errors. For example, numbers were missing in some columns, incorrect titles were used for some statements, spelling mistakes were included, notes appeared in the wrong order, and incorrect narrative appeared in some financial statement notes.

In these cases, the financial information included in the draft annual report did not use the approved text in the final financial statements (i.e., the final version that is covered by the signed auditor's report).

Implications and risks if recommendation not implemented

Lack of a strong quality control system could result in inaccurate and incomplete financial statements information in the Ministry annual report.

1.2 Contract agreements

Recommendation

We recommend that the Department of Finance and Enterprise have signed contract agreements in place before goods or services are supplied.

Background

The Department's policy is to contract for goods, services, and facilities when:
- it is of economic benefit to the Department,
- the goods and services are essential for clients, and
- contracting is in accordance with overall government practice.

Contracts should be signed before work starts

The contracts policy states that no contractor can be engaged to provide goods or services before signing a formal contract agreement. The policy specifies contract approval limits. Appropriate approval must be obtained before signing a contract or changing an existing contract.

Criteria: the standards we used for our audit

The Department should ensure that:
- appropriate approval is in place before entering into a contract
- legally enforceable contracts are in place that define the roles and responsibilities of both parties before a contractor supplies goods or services

Our audit findings

Contracts signed after contract start date

We selected 10 consulting contracts for testing. We identified that in four cases, the Department had signed the contract agreement after the contract's start date. The delay in signing ranged from 19 days to 40 days and the contract amounts ranged from $75,000 to $572,000.

We understand that the Department of Justice clarified the intent of clause 7 in the Department's standard contract template, which specifies the contract start date. Justice advised that clause 7 requires a written agreement, executed at the earliest possible time after the start date, to be in place if there is justification for a delay. We did not find any documentation explaining the delays in signing the four contracts.

We also noted that in four cases the contract approval form required by the Department's policy was signed after the contract's start date. The contract approval form provides evidence that the Department has completed its due diligence before entering into a contract.

Implications and risks if recommendation not implemented
Without a signed contract in place, the parties' rights and responsibilities are not clearly defined.

1.3 Financial reporting processes and succession planning—Investment Accounting and Reporting Group—progress report

Background

<div style="float:left">Management succession plan needed</div>

Last year, in our *October 2008 Report* (page 268), we recommended that the Investment Accounting and Reporting (IAR) Group of the Department of Finance and Enterprise improve the timeliness of its financial reporting and decrease workloads by recruiting skilled personnel with expertise in investment accounting, allocating sufficient time for management review, and creating a management succession plan.

The IAR group is responsible for the financial reporting of the investment clients of Alberta Investment Management Corporation (AIMCo). They prepare endowment fund financial statements, and financial statement information for the pension plans and other government entities investing with AIMCo. On a monthly basis, IAR prepares bank reconciliations, reviews investment transactions and prepares financial reports for approximately 60 investment pools.

Management actions

Financial Services division restructured

The Financial Services division of the Department was restructured and additional resources were obtained so that priorities could be met and training provided to new and existing staff. The new resources will form part of the succession plan in the IAR group.

Draft financial statements, working papers and bank reconciliations were provided to the auditors in accordance with deadlines which were earlier than the previous year.

To fully implement this recommendation, IAR needs to ensure that a management succession plan is established for the group.

1.4 Donated funds—Alberta Heritage Scholarship Fund—implemented

Background

Last year, in our *October 2008 Report* (page 270), we recommended that the Department of Finance and Enterprise develop a process to ensure complete, accurate and timely recording of Alberta Heritage Scholarship Fund donation revenue.

The Alberta Heritage Scholarship Fund receives contributions from other ministries and government departments for specific scholarship programs. Last year, a program administered by the Department of Advanced Education and Technology, expensed matching scholarship donations and recorded a corresponding liability without notifying the Scholarship Fund.

Our audit findings

New process for donation revenue

Management put in place a new process for confirming donation revenue with the Department of Advanced Education and Technology.

1.5 Payroll bank reconciliations—implemented

Background

Last year, in our *October 2008 Report* (page 271) we recommended that the Department of Finance and Enterprise work with its service provider to ensure that bank reconciliations for the government's payroll disbursement bank account are promptly prepared and reviewed.

Our audit findings

The Department's discussions with its service provider revealed that personnel issues impeded their ability to promptly complete the payroll disbursement bank reconciliations. The service provider subsequently resolved the personnel issues and now has two people assigned to deal with payroll disbursement bank account matters.

Bank reconciliations now promptly prepared

We reviewed the payroll disbursement bank reconciliations for July 2008 to December 2008. We noted that the service provider is now preparing these monthly bank reconciliations within the timelines specified by the Banking Operations Agreement. The Department obtained the supporting documents for items included on the reconciliations and completed its own reviews on a timely basis.

1.6 Disclosing Supplementary Employee Retirement Plans (SRPs)—implemented

Background

In our *2005–2006 Annual Report* (No. 30—vol. 2, page 97), we recommended that the Department of Finance review Treasury Board directives to ensure that the amount disclosed as the total compensation of each senior executive includes Supplementary Employment Retirement benefits earned in the year. In our 2006–2007 *Annual Report* (page 181) we reported that management implemented our recommendation.

We also recommended in our *2005–2006 Annual Report* (No. 30—vol. 2, page 97) that the Department assess the costs and risks associated with Supplementary Retirement Plans (SRPs).

Our audit findings

Pre-funding required

The Department completed its assessment of the costs and risks associated with SRPs and concluded the risks associated with SRPs would be essentially eliminated if SRPs were pre-funded—that is, each public sector entity had sufficient assets set aside, either in earmarked assets or a retirement compensation arrangement under the *Income Tax Act*[1], to cover the costs associated with its SRPs.

Treasury Board has drafted a directive that would require pre-funding of SRPs based on their actuarial cost. Once the directive has been issued, Treasury Board will need to monitor and enforce compliance with the directive.

In our *2008 October Report* (page 47), we reported on executive compensation, including SRPs. Further discussion of SRPs as a component of executive compensation is on page 25 of this report.

2. Alberta Treasury Branches

2.1 SAP core banking system implementation

Background

ATB implementing SAP banking system

ATB is implementing a new SAP banking system that includes a full suite of financial, banking and support modules. This project, known as Core, will transform ATB's banking system, financial reporting systems, internet and telephone banking applications. ATB installed the major components of its current banking system in the mid-1980s. A banking system is the way a bank keeps track of loans and deposits. The Core project will integrate ATB's banking systems with its financial reporting and customer access systems.

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[1] R.S.C. 1985, c.1 (5th supp.)

Operational benefits expected	ATB expects to see significant operational benefits from its new system and to provide better, more efficient services to its customers. In introducing this new technology, ATB will also transform many of its business processes to create operational efficiencies and reduce manual processes.
Project budget is $160 million	The Core project was budgeted at $160 million. Its scheduled completion date is April 2010.

What we did

<table>
<tr>
<td>We audited functional design process</td>
<td>We audited the functional design process ATB followed for the SAP finance modules, which include accounts payable, fixed asset and general ledger modules. ATB's internal audit group performed a similar audit for the SAP banking modules.</td>
</tr>
<tr>
<td>Blueprint is the key output</td>
<td>A functional design process confirms the business requirements to be included in the system before designing the system. A system blueprint is the key output of the functional design process. That blueprint is then used to build the system.</td>
</tr>
<tr>
<td>Understanding functionality is critical</td>
<td>ATB's approach is to minimize the need for customization; it is purchasing the SAP financial system for its existing functionality. The critical step for ATB is to fully understand the functionality, including the controls, in the new SAP finance modules and consider how those should be used.</td>
</tr>
</table>

In this audit, we assessed whether ATB management:

- asked knowledgeable ATB staff to review, analyze and document ATB's finance processes
- considered all significant finance requirements at the functional design stage
- considered external requirements, internal policies and internal controls as part of the functional design process
- ensured that appropriate ATB staff or committees reviewed and approved the finance functional design

What we found

- Knowledgeable ATB staff analyzed and documented ATB's finance processes.
- Except for our concerns related to controls (see our recommendation on page 221), ATB identified and considered its business process requirements and included them in the design of the finance module.
- ATB management considered internal policies such as business rules. However, ATB was unable to provide evidence that it had sufficiently considered controls in the functional design stage.

- Blueprint documents were the main output of the finance functional design process. These documents were appropriately reviewed and approved by ATB staff.

Conclusion

For our audit to have a timely impact on this large project, our findings need to be dealt with before the project is complete. Therefore, we have advised the Strategic Steering Committee[2] they should receive the appropriate assurances from the project leadership team that the organization's control objectives have been satisfied before the user acceptance testing phase of the project is complete. Management has agreed to act on our advice. At this point, there is sufficient time before the transition date for the internal control matters we have identified to be dealt with.

Internal controls

Recommendation

We recommend that the Alberta Treasury Branches Strategic Steering Committee receive the appropriate assurance from the project leadership team that the organization's control objectives have been satisfied before the user acceptance testing phase of the project is complete.

Background

Control framework helps organize controls

A control framework is a logical way to organize controls over business processes (such as financial reporting or accounts payable) to manage specific risks that may weaken an organization's ability to meet its objectives. A control framework generally consists of control objectives that align with identified risks. Organizations then identify their own specific controls to meet these control objectives.

Criteria: the standards we used for our audit

In its functional design process, ATB should use a control framework that identifies ATB's control objectives and related controls that support its finance business processes and mitigate risks.

Our audit findings

Control framework not applied

In its finance module functional design process, ATB did not apply a control framework that matched ATB's business process control objectives to the controls within the new SAP finance modules.

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[2] The Strategic Steering Committee provides oversight to the Core banking project. The Committee consists of senior executives within ATB. ATB's Chief Executive Officer chairs the Committee.

Previous work on control framework not used

In 2007–2008, ATB's internal control group used a control framework to identify and document control objectives and controls for ATB's accounts payable, fixed asset and financial reporting business processes. ATB did not use this control framework in the finance functional design process. Therefore, it has not ensured that controls within the new SAP finance module will align with ATB's control objectives and will mitigate significant risks. Our discussions with the internal control group indicate they have had only minimal involvement to date with the project team.

In our *2008 October Report* (page 278), we recommended that ATB validate and approve business processes and internal control documentation developed by its internal control group and that ATB resolve identified internal control weaknesses. Management indicated they would use the internal control group's documentation in the Core banking project to ensure that the design of the finance modules would correct existing control weaknesses. ATB was unable to provide us with evidence that this was done during the finance module functional design process.

Implications and risks if recommendation not implemented

Internal controls that meet ATB's control objectives and mitigate significant risks may not be in place when the new SAP finance module goes live in 2010.

2.2 Information technology internal control recommendations
2.2.1 Organization-wide information technology oversight
Recommendation No. 24

We recommend that Alberta Treasury Branches improve the efficiency and effectiveness of its computing environment by developing a process to ensure all ATB Business Units adopt and follow an organization-wide Information Technology governance and control framework.

Background

Information technology (IT) governance is a set of IT control processes, activities and standards that must be in place to ensure that an organization implements appropriate systems and applications and to prevent financial or information loss or unauthorized changes in an organization. An efficient and effective organization-wide IT governance program and control framework, with well-designed control processes, would allow ATB to provide secure and reliable services to clients and staff when needed.

ATB uses a decentralized approach to IT, with distinct Business Units that provide, host or administer some form of services through IT or other sources to clients and staff.

Decentralized IT requires strong IT governance

Decentralized IT may work well to quickly deliver programs or services, but it poses unique challenges for the efficient use of corporate funds, infrastructure, risk management and the security of ATB client information. It requires a strong IT governance and compliance program applied across all Business Units to reduce inherent inefficiencies, security vulnerabilities and risks.

Criteria: the standards we used for our audit

ATB should have a well-designed and effectively applied IT governance model and IT control framework to manage and control Business Unit IT, and a central authority to:

- define and provide overall business priorities, divisional IT investment allocations, IT principles and standards, and high-level governance and decision making over the entire computing environment
- ensure that IT expenditures and resource allocations are sufficient to meet ATB's overall priorities, and are used efficiently
- ensure that IT controls and standards provide sufficient structure to ensure complete, accurate, reliable and secure development and deployment of systems, applications and data

Our audit findings

In our *2006–2007 Annual Report* (vol. 2—page 97), we recommended that ATB implement an effective, organization-wide IT control framework. We concluded ATB has implemented this recommendation (see section 2.2.2). However, ATB still cannot demonstrate that all ATB Business Units have applied its IT control framework and that the IT controls are well-designed and operating effectively.

ATB cannot attest to consistent IT controls

We noted Business Unit's IT controls and standards vary and are not consistently applied. Each Business Unit manages its own IT policies and practices as they deem appropriate for their systems and applications. As a result, ATB cannot attest that the confidentiality, integrity and availability of all key application systems—and the data stored and processed in them—is adequately managed.

To implement this recommendation, we expect ATB to demonstrate that:

- a centralized authority ensures IT controls and standards are implemented throughout the organization
- a centralized authority can assert that ATB's IT control framework is being consistently followed throughout the entire organization and that IT controls are operating effectively

- Business Units assess their IT controls and provide a "sub-certification" to a central authority that their IT controls are well-designed and operating effectively
- there is specific accountability for each IT control in each Business Unit

ATB must also be able to:
- provide us with a project plan and a completion date for implementing an IT control framework that operates effectively throughout all Business Units
- conduct an IT risk assessment throughout all Business Units, identify and assess risks that are or can be mitigated through well-designed and effective IT controls, and then ensure that they are being properly mitigated

Implications and risks if recommendation not implemented

Without consolidated Business Unit IT governance and controls processes, or a central authority to ensure they are met, ATB cannot demonstrate its IT control framework has been implemented across the organization and operates effectively.

2.2.2 IT control framework—implemented

In our *2006–2007 Annual Report* (vol. 2—page 97), we recommended that ATB implement an effective, organization-wide IT control framework.

Our audit findings

ATB substantially implemented this recommendation within the IT Service Department Business Unit by:
- adopting an IT control framework based on COBIT 4.1
- developing and (is) implementing control processes through its IT control framework to mitigate risks and support business goals and objectives
- promoting the IT control framework for the entire organization via the Business Unit line managers

Now that IT has implemented a control framework, it needs to apply that control framework consistently and to IT within all ATB business units. Therefore, we make a new recommendation this year—Organization-wide information technology oversight (see section 2.2.1)—about ensuring IT controls are consistently implemented and operating effectively throughout ATB.

2.3 Service provider transition

Background

ATB changed its service provider

During summer 2008, Alberta Treasury Branches changed service providers for night depository and treasury processing, from one outsourced service provider to another. These services included handling and processing physical cash, reconciling and settlement of information for automated banking machine and nightly deposit transactions, and delivering cash to branches. ATB Central Services is the business owner of ATB's relationship with the service provider.

Observation

Problems with transaction processing created a reconciliation difference of over $1.6 million

We visited ATB Central Services in November 2008 and noted problems with its daily reconciliations between cash collected and processed by the service provider and cash recorded in ATB's general ledger. The service provider creates daily transaction blotters of activity and sends them to ATB. For multiple days between August 2008 and November 2008, the transaction blotters did not balance to the general ledger, and ATB's suspense accounts were not cleared. ATB initiated a remediation project in November 2008 to reconcile various affected general ledger accounts. At March 31, 2009, ATB had not yet reconciled the differences in the accounts to an acceptable level; the net unreconciled differences were still over $1.6 million.

Manual processes needed to correct errors

Significant manual processes had to be put in place at ATB Central Services to correct errors that resulted from the transition to a new service provider. For example, we noted the service provider was producing inaccurate customer letters, which ATB staff had to intercept to prevent them from being sent to ATB customers.

ATB's Internal Audit performed a post-implementation audit of the transition. The issues identified by ATB's Internal Audit included:

Operational impacts not fully assessed

- ATB had not adequately assessed or managed the operational requirements for this transition. The new outsourcer's staff were overwhelmed by and unable to handle the volume of transactions. This led to cash shortages at branches, incorrect cash parcels delivered and late or missing cash deliveries, night deposits not processed correctly or promptly, and manual workarounds, and balancing and reconciling problems.

Project governance needs improvement

- ATB provided inadequate project governance. ATB's project management office was not engaged and a project management methodology was not adopted. Project scope was changing or incomplete. The project's go-live date led to unrealistic timelines.

We encourage ATB management to evaluate and learn from the difficulties it encountered with this service provider transition.

2.4 Process for confirming compliance with Alberta Finance and Enterprise guidelines—recommendation repeated

While significant progress has been made, we repeat this recommendation because Alberta Treasury Branches has not yet implemented an effective process to identify material outsourcing agreements. We believe this is a critical step in the process.

Recommendation No. 25—repeated

We again recommend that Alberta Treasury Branches:

- **improve the processes for confirming its compliance with Alberta Finance and Enterprise's** *Outsourcing of Business Activities, Functions and Processes Guideline*
- **review and assess the appropriateness of the ATB staff responsible for ensuring compliance with Alberta Finance and Enterprise guidelines**

Background

We originally made this recommendation in our *2006–2007 Annual Report* (No. 26—vol. 2, page 94).

Criteria: the standards we used for our audit

ATB should have systems and processes in place to ensure it complies with Alberta Finance and Enterprise's *Guideline*, including systems and processes to:

- evaluate the risks of all existing and proposed outsourcing arrangements
- assess the materiality of outsourcing arrangements
- implement a program for managing and monitoring risks, depending on the materiality of the arrangements
- ensure that ATB's Board of Directors receives sufficient information to meet its duties under the *Guideline*

Our audit findings

Progress made but further work needed

We reviewed ATB's process to identify material outsourcing arrangements. In our opinion, ATB has not fully implemented this recommendation. While progress was made, such as managing and monitoring risks of identified material outsources and reporting on the status of material outsourced agreements, further improvements are necessary to the critical process of identifying material outsourcers.

Assessment of the materiality of proposed outsourcing arrangements

Inappropriate override exists

ATB uses a scorecard system to determine whether an agreement is classified as material and therefore subject to Finance and Enterprise's *Guideline*. If a score of 50 out of 100 is achieved, the agreement is classified as material. However, an exception—that acts as an override—exists to deem an agreement

not to be material if ATB cannot do the activity itself. We believe that an outsourcing agreement exists if ATB has outsourced a particular operational process or control to a vendor. ATB should then use the criteria in the *Guideline* to determine if the agreement is material or not. If ATB cannot do the activity itself, an exception is not appropriate, as shown in the following example, which occurred in 2008–2009.

ATB mis-classified the outsource provider as "not material"

In August 2008, ATB changed its vendor for night depository and treasury processing services. Although the arrangement with the previous vendor was considered a material outsourcing agreement and the new outsourcing agreement scored 75 out of 100 on the assessment scorecard, ATB deemed the new relationship as not material. Management concluded that because ATB could not perform one particular function internally, the whole contract was not material. In our opinion, ATB has misclassified the materiality of this outsourcing arrangement. As a consequence of their decision, this arrangement did not follow the same monitoring and control processes applied to other material outsourcers.

To implement this recommendation, ATB must further develop its processes for identifying material outsourcing relationships.

Implications and risks if recommendation not implemented
ATB cannot show it is in compliance with Alberta Finance and Enterprise's *Guideline*. ATB is ultimately accountable for all outsourced activities. Without proper controls and processes, ATB may be unable to rely on the confidentiality, availability, completeness and validity of ATB client and financial data that outsourcers handle.

2.5 Service auditor reports—user control considerations
Recommendation
We recommend that Alberta Treasury Branches improve its processes related to service providers by ensuring its business areas:
- **receive service provider audit reports**
- **review service provider audit reports and assess the impact of identified internal control weaknesses**
- **put end-user controls in place to complement service provider controls**

Background

Service providers do critical business functions

ATB uses a number of service providers to process transactions and carry out critical business functions. Where services are outsourced to service providers—for example, cheque clearing processing—controls and processes are performed by the service provider. Although ATB can outsource a portion of its control environment to service providers, the overall responsibility for these controls and processes remains with ATB.

Service provider controls protect information assets

Service auditor reports provide information and assurance that a service provider has appropriate internal controls over the transactions and processes ATB has outsourced. Significant control weaknesses in a service auditor's report could indicate that the service organization is unable to provide ATB with an adequate level of service or sufficiently protect its information assets. The lack of a service auditor's report makes it difficult for ATB to gain assurance over the service provider's control environment.

End-user controls also need to be in place

From ATB's perspective, one of the most important aspects of a service auditor report is the end-user control considerations. These are procedures the service organization recommends that ATB implement. These controls complement controls at the service organization to enhance the level of control over ATB's transactions and data. The controls at ATB and the service organization together comprise the overall control environment.

Criteria: the standards we used for our audit

ATB should have a process to:

- obtain service auditor reports from significant service providers
- review service auditor reports to assess the impact of internal control deficiencies identified by the service provider's auditor
- evaluate the end-user requirements in the service auditor reports to ensure they are in place

Our audit findings

We found that:

Monitoring processes do not exist

- ATB lacked a process to ensure that all service auditor reports for significant service providers are obtained and reviewed by the business areas
- ATB had not evaluated control deficiencies noted in these reports to assess the impact on ATB's control environment
- ATB does not have a process to ensure end-user controls identified in service auditor reports are in place and effective

Implications and risks if recommendation not implemented
Operational problems with outsourcing arrangements can go undetected if ATB does not monitor the control environment of its outsourcers and design and implement the end-user controls the outsourced service provider expects ATB to follow.

2.6 Branch compliance—implemented
We recommended in our *1999–2000 Annual Report* (No. 49—page 281) that ATB ensure its branch processes comply with corporate policies and procedures. We repeated this recommendation four times, the last being in our *2004–2005 Annual Report* (No. 33—page 195).

ATB implemented the recommendation by developing sufficient processes to:

Policies and procedures updated and compliance monitored

- develop and refine policies and procedures, and publish them through their intranet
- identify areas of non-compliance through branch audits by Internal Audit and visits by the compliance group
- coach staff in areas of non-compliance to remediate problems

2.7 Lending compliance—implemented
In our *2002–2003 Annual Report* (No. 15—page 119), we recommended that management ensure its lending practices comply with ATB policies and procedures. We repeated this recommendation twice, the last being in our *2004–2005 Annual Report* (No. 32—page 193).

Policies and procedures updated and compliance monitored

ATB implemented this recommendation by establishing several key initiatives to reduce non-compliance with ATB lending policies and procedures to an acceptable level. The initiatives include:

- developing and clarifying policies and procedures
- conducting ongoing compliance examinations
- establishing a loan review process within Central Services

2.8 Non-consumer risk ratings in Synergy—implemented
In our *October 2008 Report* (page 277), we recommended that management improve controls for capturing non-consumer risk ratings (NCRRs) in Synergy.

Risk rating process was improved

ATB has implemented this recommendation by further refining the process within Corporate Financial Services to update NCRRs in the Synergy banking system.

2.9 General loan loss allowance (GLLA) model validation—implemented
In our *2006–2007 Annual Report* (vol. 2—page 99), we recommended ATB annually validate the GLLA model against actual loss data and modify the

model based on the results. ATB's GLLA policy specifies that it will conduct regular peer comparisons to benchmark the level of the GLLA relative to other financial intermediaries. We also recommended that ATB report the validation results and controls used in the model to the Audit Committee.

GLLA model
validation
completed

ATB implemented this recommendation by validating its GLLA model against actual results, performing peer benchmarking and reporting the results of the validation to the Audit Committee.

3. Alberta Investment Management Corporation (AIMCo)

AIMCo was established as a Crown Corporation on January 1, 2008, to provide investment management services to various Alberta public sector pension, endowment and special purpose funds through a corporate structure. Prior to 2008, the investments were managed by the Department of Finance and Enterprise. AIMCo manages investments with a market value of more than $68 billion, including, for example, the portfolios of the Local Authorities Pension Plan, the Heritage Fund, the Alberta Sustainability Fund and the Consolidated Cash Investment Trust Fund. The investments are grouped into investment pools, some of which are managed internally, and others by external managers selected and monitored by AIMCo.

We audit AIMCo's internal controls for the purpose of expressing an opinion on the financial statements of the investment participants for fiscal years ending December 31 and March 31. Our work is done centrally at the pooled-fund level and includes assessing the design and operating effectiveness of internal controls over the management of investments.

3.1 Risk management

Risk of investment
losses

2008–2009 was an extraordinary year in the global economy. The impact of the sub-prime mortgage crisis, credit collapse and ensuing recession was felt around the world and continues to this day. The resulting plunge in world stock markets by 30% to 40% impacted many investors, including the Alberta public sector investments managed by AIMCo. It was within this economic climate that our audit work focused on controls to reduce the risk of investment losses. We identified the need for AIMCo to improve its measuring and monitoring of enterprise risk, its managing of derivative and credit risk, and its credit screening processes for corporate bond purchases.

New management:
new approach

As we were auditing internal control systems in the latter part of 2008–2009, the new management at AIMCo was assessing the quality of those systems and by means of a new business plan, identifying the areas of its business that needed a new approach in terms of management and control. By the spring of 2009, subsequent our audit, AIMCo began to introduce new risk management

processes. In our opinion, the improvements under way will significantly strengthen the controls that AIMCo needs to manage its business.

Areas for improvement

Here are our risk management findings from our 2008–2009 audit work. They are presented as observations as the new management group is taking action to resolve them. In summary:

- Enterprise risk management—for most of the year, there was no enterprise risk management program
- Derivative risk management—for most of the year, there was no entity-wide reporting or analysis of derivative positions, and of credit or liquidity risks
- Derivative credit risk monitoring—for most of the year, reported on monthly, so not available when investment decisions were being made
- Corporate bond credit screening—policies last updated six years ago, and no overall limits

In subsequent audits, we will assess whether new or enhanced controls are operating as designed.

Enterprise risk management

Risk awareness at all levels

To manage risk effectively, AIMCo has to incorporate risk awareness and management into the processes used to pursue its objectives at all levels of the organization. Enterprise risk management will help AIMCo to identify and understand all the risks it currently faces and those on the horizon. Tools to measure and monitor organization-wide risk help to integrate the management of risk, operations and investing.

New monitoring tool

AIMCo has developed and introduced the AIMCo Dashboard—a tool to display the critical information needed to monitor its risks. The Dashboard, with the major risks facing AIMCo and the specific strategies to mitigate those risks, will be reviewed regularly by the executive management team. It was presented to the AIMCo Board at their April 2009 meeting.

Derivative risk management

Measure derivative risk

To limit the risk of investment losses, AIMCo has to have adequate systems to measure derivative risk and to monitor and report adherence to risk tolerance thresholds entity-wide. The derivate risk management program has to be integrated with overall risk management. Derivative positions taken in one investment pool should not counteract or negate derivative positions taken in other investment pools.

New controls

AIMCo has established a Derivatives Risk Management Committee, comprising senior management, to provide due diligence and overview of

AIMCo's derivative and credit activity. New derivative risk management policies have been introduced. Derivative risk monitoring is a feature of the Dashboard.

Derivative credit risk monitoring

Monitoring exposure daily

AIMCo has to have effective processes to monitor the credit risk of its derivative counterparties. This means daily monitoring of counterparty exposure and credit limits, the daily preparation of aggregate counterparty credit risk exposure and the review of these reports before authorizing additional investment purchases.

New controls

AIMCo is replacing its existing derivative indemnity agreements with new agreements that require collateral to be posted. The Dashboard now reports AIMCo's aggregate counterparty exposures every two weeks.

Corporate bond credit screening process

Analysis prior to purchase

AIMCo has to have effective credit screening processes for its purchases of government and corporate bonds. Such processes include up-to-date credit analysis policies and procedures, with authorization limits for purchases, and the requirement for an independent full credit analysis prior to purchase.

New controls

AIMCo management is adding more staff to the credit analysis group and will be using independent external research. The size of individual investments in any one issuer, is being limited to a percentage of assets under administration to avoid concentration of credit risk. This information is reported on the Dashboard.

Here are the recommendations from our 2008–2009 audit work.

3.2 Internal audit

Recommendation

We recommend that AIMCo re-establish an Internal Audit group.

Background

Internal audit assesses control environment

The purpose of Internal Audit is to determine whether the governance, risk management and internal control processes, as designed and represented by management, are adequate and functioning well. Internal Audit provides an independent and objective view of an organization's risk management and control environment and helps management to be accountable through its reporting to the Audit Committee.

In the past, AIMCo's Internal Audit and Compliance group (IACO) reviewed internal controls and compliance related to processing of investment

transactions. An Investment Compliance group continues to perform some internal audit functions, including compliance testing, exception reporting and an operational due diligence review of new external managers for hedge fund and Canadian equity investments.

Criteria: the standards we used for our audit

AIMCo should have an internal audit group to ensure governance, risk management and internal control processes, as designed and represented by management, are adequate and functioning well.

Our audit findings

Internal audit discontinued

We spoke with former members of the IACO, who confirmed that no internal control reviews were performed in 2008–2009. Due to the discontinuation of IACO and preparation for internal control certification, AIMCo does not plan to conduct independent internal control testing in the future.

Implications and risks if recommendation not implemented

Without the independent and objective review of AIMCo's internal controls that an internal audit group provides, investments and income could be subject to misappropriation and error.

3.3 Valuation of private equity and hedge fund investments

Recommendation No. 26

We recommend that AIMCo establish a process to estimate current market values for private and hedge fund investments.

Background

Pension income is yearly market value change

Net income for pension plan investments is calculated as the difference in market value between January 1 and December 31 each year. Valuations for private investments and hedge funds are difficult to obtain and may be based on estimates. The most reliable form of estimate of market value for private and hedge fund investments, are financial statements prepared by the general partners who manage these investments on behalf of AIMCo.

AIMCo's private investments include private equities, private income, private infrastructure and timberland investments. AIMCo updates valuations for these investments when their general partners submit unaudited quarterly financial information, which is generally three to six months after quarter-end. Unaudited financial statements for hedge fund investments are obtained monthly by the custodian, State Street, with a one-month time lag.

Criteria: the standards we used for our audit

AIMCo should have a process to obtain the current market value of all private and hedge fund investments at December 31, and compare it to the recorded market values of these investments. If the recorded market values are significantly different from the current market values, they should be adjusted.

Our audit findings

Private investment values outdated

We found that at December 31, 2008, the valuations of most of the private equity investments were based on September 30, 2008 unaudited financial statements and some were based on June 2008.

In February 2009, the AIMCo private equity portfolio managers contacted private equity general partners by phone to obtain updated market values at December 31, 2008. This process resulted in a late write-down of private equity and private income investments by $249 million and $50 million dollars, or 16% and 3.9% of these pools respectively.

Hedge fund investments were valued using unaudited information from November 2008, supplied by the investment custodian. Although AIMCo staff received December 2008 valuation information for these pools in mid-February 2009, the recorded valuations were not adjusted. The total decrease in value of these investments between November 2008 and December 2008 was $39 million, or 2.5% of these pools.

Private investment values need December 31 update

The AIMCo CFO should lead a process that reviews the market value of all private and hedge fund investments at December 31 each year. The current market values should be obtained from recent externally prepared financial statements, should be compared to the market values recorded in the AIMCo general ledger and, if the general ledger market values are significantly different, they should be adjusted.

Implications and risks if recommendation not implemented

Net income from pension plan investments could be misstated if private and hedge fund investments are not recorded at current market values each year.

3.4 Coordination with the Department of Finance and Enterprise

Recommendation

We recommend that AIMCo work with the Department of Finance and Enterprise to:

- **record all financial statement accounting adjustments in the investments general ledger on a timely basis**
- **coordinate the timing of private investment valuations so that valuation updates to the investments general ledger are entered before the Department performs its quarterly write-down analysis**

Background

Finance identifies investment pool errors

The Department of Finance and Enterprise (Finance) uses information from the investments general ledger to prepare financial statements for the Alberta Heritage Savings Trust Fund (Heritage Fund), other endowment funds, pension plans and other entities. During this process, Finance identifies errors in the completeness, accuracy and valuation of the investment pools administered by AIMCo. These errors are then corrected in the financial statements. Other errors in the investment pools and errors in the financial statements are identified during the audit process. At the conclusion of the financial statement preparation and audit processes, the errors that have been corrected in the financial statements must be recorded in the investments general ledger.

AIMCo values publicly traded investments on a daily basis using external market data. Private investments are valued each quarter using the most recent financial statements provided by external fund managers. In most cases, private investments are valued using financial statement data from the previous quarter.

As part of their process for preparing quarterly financial statements for the endowment and pension funds, Finance reviews investment valuations to assess if impairment has occurred. If impairment has occurred, the investment cost is written down in accordance with Finance's write-down policy.

Criteria: the standards we used for our audit

Accounting errors that are corrected in the audited financial statements of the Heritage Fund, other endowment funds, pension plans and other entities must be corrected in the investments general ledger.

A write-down analysis should be based on the latest and best valuation information available.

Our audit findings

Errors not corrected by AIMCo

While reviewing the financial statements of the Heritage Fund's third quarter, which ended December 31, 2008, we found that adjustments in four equity pools and the timberland investment pool had not been recorded in the investments general ledger for more than a year. These unrecorded adjustments were the result of incorrect income allocation, accrual of derivative income, discontinuance of hedge accounting and accumulated miscellaneous errors.

Impairment analysis used outdated values

Finance performed its March 31, 2009 impairment analysis using the investments general ledger valuations as of April 1, 2009. Write-downs were taken on public and private investments. However, AIMCo didn't update its private equity valuations until April 3, 2009. Consequently, Finance's write-down analysis for private investments was not based on the most current valuations.

Implications and risks if recommendation not implemented

If accounting errors identified by the financial statements preparation and audit processes are not recorded in the investments general ledger, there is a risk that investment reports and returns as reported by AIMCo to client investors will be incorrect.

3.5 AIMCo financial statements

Recommendation

We recommend that AIMCo improve its processes and internal controls to achieve completeness, accuracy and increased efficiency in financial reporting.

Background

Management is responsible for preparing financial statements and accompanying notes in accordance with Canadian generally accepted accounting principles and for ensuring effective internal controls over financial reporting.

New staff prepared financial statements

AIMCo's financial statements for the first full year of operations were prepared by new AIMCo staff, who had not been involved in preparing AIMCo's first financial statements, for the three months ended March 31, 2008.

Criteria: the standards we used for our audit

Management's controls over financial reporting should enable the production of quarterly and annual financial statements, including notes and other financial information, in accordance with Canadian generally accepted accounting principles. This financial reporting should be provided to AIMCo's senior management and the Board promptly.

Our audit findings

The first draft of AIMCo's annual financial statements, provided on
April 28, 2009, was not complete and was not supported by working papers.

We worked with management and audited progressively improving financial
statements as they prepared supporting documentation for the amounts and
disclosures in the financial statements.

With additional skilled staff in the finance area, AIMCo should be able to
improve the effectiveness of its financial statement preparation process in
several ways, including:

- identifying new developments that may affect the financial statements and
  evaluating the appropriate financial statement treatment well before
  year-end
- preparing, analyzing and reviewing financial statement component working
  papers that flow logically to support management's conclusion that
  financial statement amounts and disclosures are complete and accurate

Implications and risks if recommendation not implemented

Senior management and the Board will not have quality financial information
produced promptly and at a reasonable cost.

3.6 Internal control certification—progress report

Background

In our *2007–2008 Annual Report* (No. 32—page 282), we recommended that
AIMCo introduce a process to get the organization ready for internal control
certification by:

- ensuring that its strategic plan includes internal control certification
- developing a top-down, risk-based process for internal control design
- selecting an appropriate internal control risk assessment framework
- considering sub-certification processes, with direct reports to the Chief
  Executive Officer and Chief Financial Officer (CFO) providing formal
  certification on their areas of responsibility
- ensuring that management compensation systems incorporate the
  requirement for good internal control
- using a phased approach to assess the design and operating effectiveness of
  internal controls

Management agreed with our recommendation and began an internal control
certification project.

*AIMCo needs
internal control
certification*

Management actions

AIMCo has included internal control certification in its work program for 2009–2010. The project is in the scoping stage. The CFO has discussed the process with experienced accounting firms and is preparing an initial "Systems and Control Objectives" document to assess the current position. The CFO is identifying the required level of involvement by an external Chartered Accountant firm. The goal is to obtain a Type 2 CICA Section 5970 Service Organization Report and to have a process in place to maintain annual certification.

3.7 Information technology risk assessment—progress report

Background

In our *2007–2008 Annual Report* to management, we recommended that AIMCo:

- regularly conduct a comprehensive information technology (IT) risk assessment to identify and rank the risks that can be mitigated with well-designed, efficient and effective IT controls
- use an IT control framework to develop and implement a set of well-designed IT control processes to mitigate identified risks and to provide efficient, secure programs and services to its investors

Management actions

AIMCo has a security risk management framework. However, it is not used to regularly identify and assess IT risks. According to AIMCo's *IT Control Program and Strategy*, AIMCo plans to:

- conduct IT risk and control requirements assessment (in progress)
- conduct current IT control gap evaluation (planned)

AIMCo engaged outside help to conduct an IT controls assessment and gap analysis. The consultant issued a report in September 2008. AIMCo is:

- developing a project charter and project plan for implementing a service desk to provide help desk services to AIMCo
- mapping IT's current activities and initiatives to IT control management framework requirements to mitigate gaps identified by the consultant

During our 2009–2010 audit, we will assess AIMCo's progress in implementing:

- an IT governance, risk and compliance program and ensure the board and executive management provide adequate oversight, strategic direction, ensure objectives are achieved, ascertain that risks are managed appropriately, and verify that AIMCo uses all of its IT resources effectively and responsibly
- a process to regularly assess IT risks and their mitigation

- an IT control framework to implement well-designed, efficient and effective controls to mitigate identified risks
- effective controls, through contracting or other processes, to ensure all service providers—including Government of Alberta ministries or agencies:
  - can properly, securely and consistently provide required services before entering into agreements with them
  - consistently meet all of AIMCo's security and internal control requirements
  - provide assurance or demonstrate that their controls consistently meet AIMCo's security and service level requirements

3.8 Conflicting responsibilities for internal audit—implemented

Background

Last year, in our *October 2008 Report* (page 284), we recommended that AIMCo resolve the conflicting job responsibilities of its Chief Internal Audit and Compliance Officer.

Many of the roles and responsibilities that were performed by the Chief Internal Audit and Compliance Officer are normally those of a Chief Financial Officer (CFO). The organizational structure of AIMCo did not include a CFO, although it did include the role of a Chief Operating Officer (COO). The Chief Internal Audit Officer usually reports directly to either the CEO or to the Board of Directors, to ensure the independence of this role. The Chief Compliance Officer usually reports to the COO.

External and internal auditor recommendations are usually dealt with by the CFO, who works with operational management to ensure that the recommendations are implemented. Internal audit is not asked to implement their own recommendations, due to the clear conflict of interest when they are asked to report whether their own recommendations have been implemented.

Our audit findings

Conflicting responsibilities eliminated

We found that the internal audit group has been disbanded and that the Senior Compliance Officer position has been eliminated. The internal control certification process will be administered by the CFO and the Corporate Compliance function will be transitioned to the Chief Legal Officer by June 30, 2009.

The CFO has taken on the role of liaison with the external auditor and coordination with management to ensure that audit recommendations and operational requirements are met.

We deal with the need for an Internal Audit Group on page 232.

3.9 Controls over trading with approved counterparties—implemented

Background

Last year, in our *October 2008 Report* (page 290), we recommended that AIMCo improve its processes for setting up and maintaining approved counterparties in the swap database system.

AIMCo's counterparty trading policy states that it can engage in derivative transactions with counterparties that were approved by the Derivative Risk Management Committee and that have signed an International Swap and Derivative Association (ISDA) agreement. AIMCo uses a swap database system in which approved counterparties are maintained on a master file. When investment traders wish to initiate a swap transaction, they begin by selecting an approved counterparty from a drop-down menu in the swap database system.

Last year, we found that one counterparty was included in the counterparty trading list in the swap database system, but it had not signed an ISDA agreement with AIMCo. A second counterparty was noted as being suspended from trading, but was not removed from the counterparty trading list.

Our audit findings

We found that both counterparties were removed from the counterparty trading list in the swap database system.

Management has improved reporting of approved counterparties, including information from the credit rating analysis.

3.10 Performance measurement review processes—implemented

Background

Last year, in our *October 2008 Report* (page 291), we recommended that AIMCo improve its processes for management review and approval of investment performance information by:
- implementing a review and approval process within the performance management group for investment performance reports
- evidencing the review process by signing or initialling the reports

Manager reviews and approves reports

A Monthly Management Summary Report for performance reporting was implemented in April 2008. The Summary is signed by the Manager of Investment Performance as well as the analysts who worked on the performance information for that month. Before signing the report, the Manager is responsible for checking the backup information for the listed changes. It is

then filed in the binder with all the reports, analyses and supporting
documentation for that performance month.

Our audit findings

We found that the Monthly Management Summary Report was prepared,
reviewed and all identified issues were resolved on a timely basis.

4.   Alberta Capital Finance Authority
4.1 Deadlines to finalize financial statements, finish the audit, and schedule
the Audit Committee meeting—implemented
Background

Last year, in our *October 2008 Report* (page 292), we recommended that
management and the Audit Committee of Alberta Capital Finance Authority
extend the deadlines for:

- finalizing the financial statements
- completing the financial statement audit
- scheduling the Audit Committee meeting to approve the
  December 31, 2008 financial statements

Our audit findings

The deadlines for finalizing the financial statements, timing of the audit and
audit committee meeting were extended by one week.

5.   Alberta Securities Commission
5.1 Purchase policy—implemented
Background

Last year, in our *October 2008 Report* (page 294) we recommended that the
Alberta Securities Commission clarify its purchase policy to ensure compliance
with the Trade, Investment and Labour Mobility Agreement (TILMA).

The TILMA is an agreement struck between the provinces of Alberta and
British Columbia to reduce barriers to trade, investment and labour in both
provinces. Last year, we found contradictions in the purchase policy of the
Alberta Securities Commission and certain provisions related to the purchase of
services over $10,000 did not meet TILMA requirements.

Our audit findings

Management has clarified its purchase policy and it now adheres to TILMA.

Financial statements

Ministry and Department

We issued unqualified auditor's opinions on the financial statements of the Ministry and the Department for the year ended March 31, 2009.

Other consolidated entities

We issued unqualified auditor's opinions for the following entities consolidated within the Ministry:

For the year ended March 31, 2009:
- Alberta Cancer Prevention Legacy Fund
- Alberta Heritage Foundation for Medical Research Endowment Fund
- Alberta Heritage Savings Trust Fund
- Alberta Heritage Scholarship Fund
- Alberta Heritage Science and Engineering Research Endowment Fund
- Alberta Investment Management Corporation
- Alberta Risk Management Fund
- Alberta Securities Commission
- N.A. Properties (1994) Ltd.
- Provincial Judges and Masters in Chambers Reserve Fund
- Supplementary Retirement Plan Reserve Fund

For the year ended December 31, 2008:
- Alberta Capital Finance Authority
- Alberta Pensions Services Corporation
- Alberta Local Authorities Pension Plan Corp.
- Credit Union Deposit Guarantee Corporation

For the year ended September 30, 2008:
- Gainers Inc.

In addition, we examined the financial statements, management letters, and audit files for the year ended December 31, 2008 for Alberta Insurance Council, a Crown-controlled corporation consolidated with the Ministry. A public accounting firm audits the Council.

Alberta Treasury Branches

We issued unqualified auditor's opinions for all of the financial statement audits we completed for Alberta Treasury Branches (ATB) and its subsidiaries (ATB Investment Services Inc., ATB Investment Management Inc., ATB Securities Inc., ATB Insurance Advisors Inc.) for the year ended March 31, 2009.

We issued unqualified review engagement reports on ATB's quarterly financial statements.

A public accounting firm performed compliance audits of ATB's three subsidiaries (ATB Investment Services Inc., ATB Investment Management Inc., and ATB Securities Inc.) and reported directly to the applicable regulatory bodies. We reviewed the results of these audits:

- Mutual Fund Dealers Association of Canada's Financial Questionnaire and Report as at March 31, 2009.
- Investment Industry Regulatory Organization of Canada's Joint Regulatory Financial Questionnaire and Report as at March 31, 2009.
- Compliance with applicable sections of National Instrument 81-102 as required by the Alberta Securities Commission for the year ended March 31, 2009.

Entities not consolidated within the Ministry

We also issued unqualified auditor's opinions on the financial statements of the following entities that are not consolidated within the Ministry:

For the year ended March 31, 2009:

- ARCA Investments Inc.
- Consolidated Cash Investment Trust Fund
- Provincial Judges and Masters in Chambers (Registered) Pension Plan

For the year ended December 31, 2008:

- Local Authorities Pension Plan
- Management Employees Pension Plan
- Public Service Management (Closed Membership) Pension Plan
- Public Service Pension Plan
- Special Forces Pension Plan
- Supplementary Retirement Plan for Public Service Managers

Performance measures

Unqualified review engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Health and Wellness

Summary

Department of Health and Wellness

The Department should:

- examine and clarify the role of its Compliance Assurance Branch in the implementation and execution of infection prevention and control compliance monitoring in Alberta—see page 246
- improve its control processes to ensure accountability for conditional grants—see page 252

The Department with Alberta Health Services (AHS) and the Universities has implemented our 1998–1999 recommendation to improve accountability for and governance of academic medicine—see page 253

Due to changed circumstances the following recommendations are no longer valid:

- our 2002–2003 recommendation to improve the process on funding province wide services—see page 255
- our 2005–2006 recommendations to improve the Department's allocation methodology for global funding—see page 255

Our findings and recommendations on Food Safety Follow-up systems audit are included in a separate section of this report—see page 87

Alberta Health Services

On May 15, 2008, the Minister of Health and Wellness announced that on April 1, 2009, the nine regional health authorities, two provincial boards (Alberta Cancer Board and Alberta Mental Health Board) and the Alberta Alcohol and Drug Abuse Commission (the "Authorities") would amalgamate into one health authority—Alberta Health Services (AHS).

For the year ended March 31, 2009, each Authority continued to exist and to produce its own financial statements. We were appointed as the auditor for each of these Authorities for the year ended March 31, 2009.

We have recommended that AHS:

- improve controls for executive termination payments—see page 256
- understand the inconsistencies within its existing supplementary retirement plans (SRPs) and the impact of any future funding decisions, administer them consistently and have sufficient funds available to meet the SRP obligations—see page 260

- develop an information technology control framework and improve its information technology controls—see page 262
- approve the annual budget and financial plan—see page 267
- improve the financial management controls for capital projects—see page 268
- improve the year-end financial reporting processes—see page 274
- improve the efficiency and effectiveness of the expense approval controls—see page 277
- approve drug purchases and appropriately segregate the duties—see page 278
- implement appropriate controls for physician recruitment incentives—see page 279
- comply with its investment policy—see page 280

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Our audit findings and recommendations

1. Department of Health and Wellness
1.1 Monitoring infection prevention and control processes
   1.1.1 Summary

Health's role

The Department of Health and Wellness (Health) is responsible for reviewing and investigating various issues as part of its role to protect and promote public health in Alberta.

The Health Quality Council of Alberta (HQCA) is an independent organization legislated under the *Regional Health Authorities Act*[1] to measure, monitor and assess patient safety and the quality of health services. The HQCA conducts reviews at the request of the Minister and recommends improvements. The Minister has final authority for deciding which of these recommendations Health will implement. Our audit mandate does not extend to auditing or judging such policy decisions.

Ten recommendations made to Health by HQCA

In July 2007, the HQCA made recommendations to Health and other entities after a review of infection prevention and control (IPC) processes in the (then) East Central Health Region. Health accepted 10 of the recommendations from this review.[2]

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[1] See Section 17 of the *Regional Health Authorities Act*, R.S.A. 2000, c.R-10. HQCA was established under the *Health Quality Council of Alberta Regulation* 130/2006 on July 1, 2006.
[2] *Review of the Infection Prevention and Control, and Central Sterilization Issues in East Central Health Region, HQCA 2007* – Refer to http://www.hqca.ca/assets/pdf/HQCA_Full_Report_July_25_2007.pdf

What we examined

We examined the processes at Health to review, assign responsibility and monitor implementation of accepted recommendations about IPC issues identified in the HQCA report, and to take necessary follow-up action.

What we found

Process to implement in place; monitoring and follow-up not timely

Health developed a process to implement the recommendations it accepted from HQCA. It assigned responsibility for planning, timelines, deliverables and resources needed to carry out those recommendations. Health developed and issued IPC standards, required establishment of regional IPC committees, provided funds for upgrading facilities and developed education programs. However, Health has been challenged to promptly monitor and follow-up on the IPC standards it developed.

Visits scheduled for East Central Health

Facility-based monitoring of compliance to IPC standards is the responsibility of Alberta Health Services (AHS). Health's Compliance Assurance Branch has scheduled 12 facilities in the former East Central Health Region for review during September 2009 to verify that AHS programs for monitoring compliance are operating as intended.

Acute care facilities must comply with IPC standards

In this report, we recommend that Health examine and clarify the Compliance Assurance Branch's role, relative to AHS in implementing IPC compliance monitoring in acute care[3] facilities across Alberta. Albertans need confidence that high-risk facilities such as those identified by HQCA in 2007 are complying with IPC standards.

Compliance Assurance Branch role in IPC

In our *October 2008 Report*,[4] we recommended that Health complete a comprehensive risk assessment to improve the effectiveness of its compliance monitoring activities. The findings from our current audit support expanding that recommendation to include examining and clarifying the role that Health expects of its Compliance Assurance Branch, particularly with respect to IPC matters.

Why this is important to Albertans

Albertans need assurance of the safety and quality of the healthcare system. Without robust compliance monitoring processes to support IPC initiatives, there is a continual risk that unsafe practices may persist.

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[3] Hospitals and other types of facilities as identified in the HQCA report. Health's Compliance Assurance Branch currently conducts some IPC related reviews in continuing care settings.

[4] Recommendation No. 35, page 300 of the *Report of the Auditor General of Alberta—October 2008*

1.1.2 Audit objectives and scope

Our audit
objective

Our objective was to determine if Health has systems to effect and monitor implementation of accepted HQCA recommendations from the review of IPC processes in the East Central Health Region. In performing this audit, we:

- examined Health documents pertaining to the IPC initiatives, and
- interviewed management and staff.

We did not examine the status of HQCA's recommendations to St. Joseph's General Hospital, the East Central Health Region and the Alberta Catholic Health Corporation.

1.1.3 Our findings and recommendation
Compliance monitoring activities
Recommendation
We recommend that the Department of Health and Wellness examine and clarify the role of its Compliance Assurance Branch in the implementation and execution of infection prevention and control compliance monitoring in Alberta.

Background

Minister requested
review of IPC
practices

In March 2007, the Minster of Health and Wellness asked the Health Quality Council of Alberta (HQCA) to conduct a review and make recommendations to improve IPC practices at Vegreville and throughout the East Central Health Region. HQCA issued its review (the HQCA Report) in July 2007. Of HQCA's 76 recommendations, 10 were directed at Health and were accepted. The remaining recommendations were made to St. Joseph's General Hospital, the East Central Health Region and the Alberta Catholic Health Corporation.

Health then
conducted
provincial IPC
review

Health subsequently conducted a province-wide review of IPC practices, policies, programs and systems at the former regional health authorities, Alberta Cancer Board and the health professional regulatory bodies.[5] Health issued the *Provincial Review of Infection Prevention and Control* in August 2007. That report identified five directions for moving forward—clarifying accountability, implementing standards and monitoring, strengthening IPC capacity, improving education and training, and enhancing provincial coordination.

On May 15, 2008, the Alberta Health Services Board replaced the nine regional health authority boards, the Alberta Mental Health Board, Alberta Alcohol and Drug Abuse Commission and Alberta Cancer Board and is now responsible for health services delivery in Alberta.

Criteria: the standards we used for our audit

For HQCA recommendations that Health accepted:

- responsibilities for implementation of accepted recommendations should be planned and assigned, including timelines, deliverables and resources
- implementation of accepted recommendations should be monitored and follow-up action taken if necessary

Our audit findings

We found that Health assigned responsibility for implementing recommendations, including responsibility for planning, timelines, deliverables and resources. However, Health has been challenged to promptly monitor and follow-up on the IPC standards it developed.

Health is responsible for:

- setting, monitoring and enforcing provincial health policy
- standards and programs
- managing capital planning, procurement and outcome measures[6]

Alberta Health Services (AHS) co-coordinates the delivery of health supports and services across the province.[7] This includes responsibility for daily facility-based adherence to Health's IPC standards.

IPC standards issued

In January 2008, Health developed and issued standards for:

- IPC accountability and reporting—requiring an IPC executive and committee in each health region—implementation in all former regions was monitored by the Compliance Assurance Branch
- cleaning of reusable medical devices—Health's target for developing a compliance monitoring process is December 2009[8]
- prevention and management of MRSA[9]—Health's target for developing a compliance monitoring process is March 2010[10]
- single-use medical devices—Health's target for developing a compliance monitoring process was June 2009[11]

Health to verify that AHS is monitoring standards in facilities

Health tasked its Compliance Assurance Branch to verify that AHS programs for monitoring compliance to IPC standards operate as intended. Currently, the Compliance Assurance Branch monitors compliance to Continuing Care Health Service Standards in continuing care facilities which includes

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[6] http://www.health.alberta.ca/health-services.html
[7] http://www.albertahealthservices.ca/57.htm
[8] *Project Charter, Implementation of the Alberta Infection Prevention and Control Strategy*, April 15, 2009
[9] Methicillin Resistant Staphylococcus Aureus
[10] *Provincial Review of Infection Prevention and Control*, prepared by Alberta Health and Wellness, August 2007
[11] Ibid.

compliance with IPC standards. However, facility-based reviews by the Compliance Assurance Branch of IPC monitoring in hospitals or other acute care facilities such as those identified as high-risk by the HQCA Report, are still developing. Health told us that during 2008, the Compliance Assurance Branch conducted administrative monitoring of the four standards—Accountability and Reporting, Single Use Medical Devices, Cleaning and MRSA. The Compliance Assurance Branch has been testing audit tools for over a year, and has completed one pilot project where three facilities were reviewed in April 2009, for compliance with IPC standards.

East Central facilities scheduled

The Compliance Assurance Branch told us that they have scheduled facility visits in the former East Central Health Region for September 2009, to test compliance with IPC standards and policies, and verify that AHS programs for monitoring compliance are operating as intended.

Monitoring activities need to be coordinated

However, the Compliance Monitoring Branch has not fully developed its role relative to AHS monitoring activities, and has limited information on AHS compliance monitoring. Clearly defined responsibilities and accountabilities as well as coordination of monitoring activities between Health and AHS, will be critical to provide confidence that high-risk facilities such as those identified by HQCA in 2007, now comply with appropriate standards.

The IPC strategy

Following are our general findings related to Health's overall IPC strategy, followed by more specific findings related to its strategic directions. We have organized the report in this manner to better align our recommendation to Health's overall strategic direction.

Strategy aligns to HQCA recommendations

In late 2007 and early 2008, Health released the *Alberta Infection Prevention and Control Strategy*, created a project charter[12] and identified a project implementation team. Health's IPC strategy has six strategic directions:

- provincial standards and monitoring
- leadership and accountability
- province-wide surveillance
- human resource requirements
- physical infrastructure
- public awareness and education

Responsibilities and timeframes assigned

To implement the IPC strategy, Health formed the IPC Project Team which consists of IPC specialities and senior health administrators. The team meets regularly, defines tasks for each IPC initiative and assigns team members

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[12] *Project Charter, Implementation of the Alberta Infection Prevention and Control Strategy*, June 25, 2008

responsibility for the completion of those tasks within an established timeframe. Progress is monitored at each team meeting. The IPC Project Team also has the ability to draw on the expertise provided by the Alberta IPC Advisory Committee which consists of infectious disease specialists, infection control experts, laboratory specialists, and representatives from Alberta health professional regulatory bodies. Both the IPC Project Team and Alberta IPC Advisory Committee form task groups as needed to complete specific initiatives.

Leadership and accountability

Bill 48 to provide clarification of responsibilities

Bill 48[13] was developed to provide clarification that the board of a voluntary health organization is responsible for the day-to-day operations of an approved hospital, but all operations must comply with the terms of a service agreement with the regional health authority. The *Act* has not been proclaimed and the date of proclamation is uncertain. A service agreement template has been developed by Health, AHS and the voluntary health organizations to guide the specific agreements on the provision of services by the voluntaries to AHS and provide greater clarity and accountability between them.

Province wide surveillance

Consistent practices to be provided

Health, AHS and IPC experts participate in an IPC surveillance working group to provide consistent practices and to:
- determine priorities for which organisms and/or infections to monitor,
- develop a methodology for conducting surveillance of each of these organisms and/or infections,
- achieve consensus on which healthcare-acquired infections and/or procedures should be under surveillance,
- develop ways to include data across the healthcare spectrum, and
- determine how various parties can support each other and share resources.

Human resource requirements

Employee education, training and capacity

Health currently has two IPC experts who support infection control practitioners in the former regional health regions. Health has also commissioned an IPC human resource capacity framework to deal with expected qualifications, educational and training programs, and capacity for IPC professionals. Standards and policies are not yet developed. In 2009, Health provided $2.5 million to AHS to support IPC education and training for sterile processing technicians, infection control practitioners and health care workers.

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[13] Bill 48—*The Health Facilities Accountability Statutes Amendment Act 2007*. The amendments were passed and received Royal Assent on December 7, 2007.

Physical infrastructure

East Central facilities upgraded

Health provided $6.8 million to upgrade central sterilization rooms in seven facilities in the former East Central Health Region. We were told these upgrades are to be complete by fall 2009. Also, $16 million was provided to health regions throughout the province to upgrade hand hygiene facilities.

Health also commissioned a background paper on a physical infrastructure framework to incorporate IPC principles, standards and expertise in the design, construction, commissioning, renovation and maintenance of health care facilities. Work continues on the implementation of this framework.

Public education and awareness

Public education on-going

In January 2008, Health implemented its *Alberta Hand Hygiene Strategy*; development of public education related to other IPC practices is ongoing. Health also commissioned an IPC exposure risk assessment. The report Health reviewed in January 2009, provides a provincial framework to guide medical officers of health when assessing exposure risk related to IPC breaches.

Implications and risks if recommendation not implemented

Without effective, timely and robust compliance monitoring processes to support other infection prevention and control initiatives, there is a continual risk that unsafe practices will continue or develop, resulting in potentially severe public health issues for Albertans.

1.2 Accountability for conditional grants—recommendation repeated

We repeat this recommendation because the Department of Health and Wellness has not made satisfactory progress to implement it in the past year.

Recommendation—repeated

We again recommend that the Department of Health and Wellness improve its control processes to ensure accountability for conditional grants.

Background

In our *2001–2002 Annual Report* (page 134), we recommended that the Department improve its corporate control processes for ensuring accountability for restricted funding. In our *2002–2003 Annual Report* (No. 22—page 152), we again recommended that the Department improve its control processes for conditional grants.

In 2007–2008, the Department had:

- issued financial directives to health authorities on how to account for conditional grants
- issued guidelines for reporting on unspent restricted grants at year-end
- stated that it would implement a new grant tracking system which would standardize and streamline the recording, tracking and monitoring of all steps in creating, approving and managing departmental grants

Our audit findings

The Department has not implemented a monitoring process for grants

The Department has not yet implemented a monitoring process to ensure that program areas receive and review reports on grants. The implementation of the new grant tracking system has been delayed to March 2010. We tested a sample of 16 conditional grants and found that:

- 10 grant recipients did not submit final reports promptly
- eight evaluation checklists submitted were incomplete—evaluation checklists are the Department's control to indicate that grant managers have reviewed final reporting and have assessed if recipients had met the grant conditions

To implement the recommendation, the Department must implement control processes over grant accountability to ensure that it receives and evaluates grant reports promptly.

Implications and risks if recommendation not implemented

Without prompt reporting, the Department cannot determine whether:

- recipients use funds according to the grant agreements
- unused funds remain available for future funding decisions

1.3 Improving accountability and transparency of academic medicine—implemented

Background

Annual expenditures on academic medicine exceed $600 million

Academic medicine encompasses medicine's roles in research, education, administration and clinical service delivery. Academic medicine is delivered primarily through the cooperation of the University of Alberta and the University of Calgary's Faculties of Medicine and Alberta Health Services (AHS). The government provides funding for academic medicine through the Departments of Health and Wellness, and Advanced Education and Technology. Annual expenditures on academic medicine, specifically the two academic health centres in the province, exceed $600 million.

Prior years' recommendations

In our *1998–1999 Annual Report* (No. 18—page 89 and No. 19—page 91) we recommended improving the accountability for and governance of academic medicine. In 1999–2000, we repeated these recommendations (No. 39—page 238) and recommended that:

- those who manage and fund academic health activities acknowledge the full scope and magnitude of those activities and the consequences for the accountability of academic health centres
- the entity or entities responsible for academic health and their mandates, roles and accountabilities be clearly defined and, on this basis, the appropriate organization and governance structure be established

Our audit findings

Roles and responsibilities clarified

The Departments, AHS and the Universities have implemented our recommendations by clarifying the roles and responsibilities for academic medicine and developing a financial reporting framework that accounts for the financial resources applied to delivering academic medicine in Alberta.

Over the past several years, the entities have taken the following actions to improve their governance of and accountability for academic medicine:

Oversight committee

- Established a Deputy Minister/Stakeholder Committee (the Committee) for academic medicine. This joint Committee brings together senior representatives from the Departments, AHS and the Universities. The Committee members have signed a memorandum of understanding to identify provincial priorities for academic medicine and clarify the roles and responsibilities of the entities involved.

Business Plan developed

- The Committee drafted a *Provincial Academic Medicine Business Plan for 2009–2012* with goals and strategies for academic medicine. The Committee has also drafted a work plan and meeting schedule to guide its operations in the next year. The Committee expects to finalize its business and work plans by September 2009.

- Set up a financial accountability team (the Team) to produce an annual report for academic medicine. The annual report includes a financial report and identifies key outputs and results, financial risks and issues.

Statement of operations

- The Team has developed a proforma statement of operations for reporting the revenues and expenditures of academic medicine. The statement summarizes the financial resources applied to the delivery of academic medicine in Alberta and includes the funding provided to academic medicine by the departments and universities, and expenses related to the activities of faculty and staff at the University of Alberta and University of Calgary.

1.4 Province-wide services—changed circumstances

In 2007–2008, we followed up on recommendations from our *2002–2003 Annual Report* (No. 23—pages 156 and 157) to the Department to improve the process on funding province-wide services. In our *October 2008 Report* (No. 36—page 303), we further recommended that the Department:

- define the role and responsibilities of the Province-Wide Services Advisory Committee
- update and follow the *Province-Wide Services Funding Procedures and Definitions Manual*

AHS is now responsible for funding province-wide services

With the establishment of Alberta Health Services, the Department no longer funds province-wide services directly. Instead, the Department provides funding to AHS, which is responsible for allocating that funding to all services, including province-wide services. As a result, the Province-Wide Services Advisory Committee is no longer required and there is no need to maintain the *Funding Procedures and Definitions Manual*.

1.5 Global funding—changed circumstances

In 2005–2006, we followed up on recommendations from our *1997–1998 Annual Report* (No. 27—page 127) and our *1999–2000 Annual Report* (No. 21—page 144). We made nine recommendations to the Department in our *2005–2006 Annual Report* (vol. 1—pages 146 to 161) for the Department to improve its allocation methodology for global funding.

Department provides unrestricted funding to AHS

With the establishment of Alberta Health Services, the funding model used by the Department has changed. The Department no longer determines the allocation of funding to regions or key services in the province. In 2009–2010, the Department provided AHS with a base unrestricted funding to provide health service across the province. This approach allows AHS to allocate the funding with the flexibility to fulfill its mandate. The Department is no longer responsible for the funding allocation to regions.

AHS now responsible for funding allocation to services and programs

AHS is now responsible for determining allocation of the funding to its services, programs and regions based on its priorities. AHS shared its resource allocation plan with the Department for the Minister's review.

2. Alberta Health Services
2.1 Executive termination payments
Recommendation No. 27
We recommend that Alberta Health Services establish controls for executive termination payments by:

- **developing and implementing appropriate approval and oversight processes**
- **clearly defining termination and post-termination benefits in employment contracts**
- **including future termination benefits in the salary and benefit disclosure in the financial statements.**

Background

Salaries, benefits and severances disclosed

Annually, the nine regional health authorities, two provincial health boards and the Alberta Alcohol and Drug Abuse Commission ("the Authorities") disclosed executive salaries, cash benefits and non-cash benefits earned in the year in their financial statements. The Authorities also disclosed severance payments and the annual expense incurred by the Authority for an executive's supplementary retirement plan (SRP) as well as the estimated SRP obligation owing to the employee after retirement.

$23 million in severance costs incurred for the AHS transition

Subsequent to the Minister of Health and Wellness announcing the amalgamation of the Authorities, Alberta Health Services (AHS) terminated the Chief Executive Officers (CEOs) and several executives in the Authorities. As of March 31, 2009, the Authorities had incurred $23 million in severance costs associated with the transition to AHS. This included severance payments for 30 senior executives, which totalled $18 million. In addition to the severance payments, some senior executives received other termination benefits such as bonuses for 2008–2009 and vacation payouts as well as either lump sum payments or monthly payments for their supplementary retirement plans. The financial statements of each Authority included the severance payments and other termination benefits paid to each executive and the other employees.

AHS used external legal counsel to assist with the negotiation and determination of severance amounts for the terminated CEOs and executives. Once AHS made the decision to terminate the CEOs and executives, the terminated employee was told to contact AHS's external legal counsel to discuss the severance details.

Severances negotiated by AHS's external legal counsel

To determine the severance amounts that the terminated executives were entitled to, AHS's external legal counsel's review included the employment contracts and related documentation as well as the recent payroll records and benefit payments provided. Negotiations between AHS's external legal counsel and the terminated executive, or their legal representative, continued until the amount of the severance payment was agreed to by both AHS's external legal counsel and the terminated executive. Once the severance amounts were agreed to by both parties, AHS's external legal counsel advised the Authorities to make the severance payments.

Criteria: the standards we used for our audit

AHS should have appropriate oversight and approval processes to ensure that termination benefits and payments are appropriate and in accordance with the employment contracts. Employment contracts should have clearly defined termination and post-termination benefits, and key management decisions regarding severances should be documented. Salary and benefit disclosures should be complete, accurate, understandable and transparent, and should include all elements of compensation.

Our audit findings

Examined severance payments for eight CEOs and 11 executives

We examined the process used by AHS to determine the executive severance amounts, approve and pay them. We also examined a sample of severance payments, including those of all eight terminated CEOs and 11 other executives. Our findings are as follows:

AHS severance process and oversight

No severance policies, defined processes or documentation

There was a lack of oversight by AHS management and its Board in the entire severance process. AHS did not have a clearly defined process, including roles and responsibilities for negotiating, reviewing, approving and paying the severances. Nor did AHS have any severance policies. When we examined the severance amounts paid, we found that AHS had no documentation to support the severance payment calculations. All of the documentation was maintained and resided with AHS's external legal counsel. While AHS's external legal counsel had a clear understanding of the severance amounts, what they included and how they were calculated, AHS did not.

Several severance payments were not approved

AHS management advised us that they were involved in certain decisions related to the severance payments. We found documentation that they were involved in some decisions, but not all. We only found documentation evidencing approval from AHS for four of the 19 severance payments we examined. The AHS Board was provided information on the CEO severance payments in July 2008 and August 2008, but they did not approve the payments.

Severance
overpayments
totalled $41,000

The lack of a clearly defined severance process with appropriate reviews, approvals and oversight by AHS resulted in three overpaid severances, totalling approximately $41,000. These overpayments resulted from mathematical errors and the use of the wrong employment contract to determine the termination benefits. AHS is currently determining whether it can recover these overpayments.

Although AHS hired external legal counsel to assist them with the severance process and negotiations, the payments should have been reviewed and approved by AHS before they were made.

Termination and post-termination benefits and documentation

Termination
benefits varied
significantly

The termination benefits included in the executive employment contracts varied significantly, since the employment contracts were negotiated by each of the Authority's previous boards and senior executives. For all of the severance payments we examined, the severance was calculated based on the salary and benefits at the time of termination, multiplied by a specified number of months as defined in the employment contract's termination notice period. The severance payments varied primarily due to the following:

- The base salaries used in the severance calculation varied. For the CEOs, the annual salaries used ranged from $240,931 to $541,787. For the other executives we examined, the annual salaries ranged from $197,669 to $515,000.
- For the CEOs, the months used in the notice period ranged from 18 to 33 months, while notice periods for other executives ranged from six to 24 months.
- Outplacement costs and legal costs were paid for some executives.

Termination
benefits not clear
in employment
contracts

In several employment contracts, the termination and post-termination benefits were not clearly defined. Therefore, we cannot conclude with certainty if the severance amounts were in accordance with the employment contracts. Examples of unclear terms include the following.

Supplementary retirement plan benefits

Termination
benefits included
SRP payments

Many CEOs and executives were enrolled in supplementary retirement plans (SRPs). Only three of the employment contracts we examined defined the SRP as a termination benefit. None of the employment contracts defined how the SRP benefit would be calculated for purposes of determining the termination benefit. We were advised by AHS's external legal counsel that AHS made the decision to calculate the SRP termination benefit based on the previous years' SRP expense multiplied by the termination notice period. But, we were unable to find documentation evidencing this decision or why it was made. Six CEOs and three executives examined, received SRP termination benefits totalling

$955,000. The payments ranged from $22,000 to $297,500. One terminated CEO will also remain in the SRP until March 31, 2011, and will continue to accumulate pensionable service. The estimated value of this benefit is approximately $290,000.

Bonus payments

Bonuses paid to terminated executives

Several employment contracts included entitlement to a bonus based on performance criteria. For the severance payments we examined, AHS paid bonuses to four CEOs and three other executives. The bonus was paid for their period of employment in the 2008–2009 fiscal year, prior to AHS terminating them. For one of the executives, the bonus was also paid for the three months following their termination date. The bonuses were based on historical bonus percentages and were not based on performance criteria. We were advised by AHS's external legal counsel that AHS made the decision to pay out these bonuses based on historical percentages, but we were unable to find documentation evidencing this decision or why it was made. The bonus payments for the CEOs and executives examined totalled $359,100. The payments ranged from $9,800 to $87,346.

Other termination benefits

Examples of other termination benefits not clearly defined

The following termination benefits were included in the severance amount, but were not clearly defined in the employment contracts:

- A CEO received a health spending benefit totalling $16,290 ($8,500 per year multiplied by a 23-month termination notice period).
- A CEO received approximately $39,000 for incremental costs associated with replacement life insurance, medical and dental coverage as well as lost pension plan benefits.

Retention bonuses

Retention bonuses paid to terminated executive

On April 1, 2008, the (then) CEO of Capital Health announced retention bonuses totalling $300,000 to 15 executives ($20,000 each) for their continued employment until March 31, 2009. The CEO and Vice President of Human Resources of Capital Health approved these retention bonuses for payment on May 27, 2008, subsequent to the Minister's decision to amalgamate the Authorities. Documentation stated that if the executives left Capital Health prior to March 31, 2009, the retention bonuses would be recovered on a pro-rated basis. Eight of the 15 executives were terminated subsequent to receiving the retention payments. But none of the payments were recovered. Capital Health's human resource department advised us that the retention payment would have only been recovered if the employee had voluntarily quit. But this was not clear in the documentation.

Salary and benefit disclosure

Because AHS did not have an ongoing process to review and examine the severance payments arising from the transition, extensive work was needed after year-end to obtain the information from AHS's external legal counsel to prepare the final salary and benefit disclosures in the Authorities' financial statements.

Termination benefits for existing executive not disclosed

The final financial statements fully disclose the termination benefits paid to the terminated executives. However, the financial statement disclosure does not include any information on entitlements or the estimated value of these entitlements should the existing executives be terminated with or without cause. Current private sector best practices suggest that the organizations disclose and quantify where appropriate:

- the circumstances that could trigger termination benefits
- the estimated termination benefits that would be provided in each case
- any significant conditions to receiving payments or benefits

Implications and risks if recommendation not implemented

Without adequately documented employment contracts, appropriate oversight, control processes and disclosure, AHS will not be aware of its executive termination costs and contractual obligations. The risk of overpayment, financial losses and corporate reputation damage to AHS will be increased.

2.2 Supplementary retirement plans

Recommendation No. 28

We recommend that Alberta Health Services review existing supplementary retirement plans and:

- **understand the terms and conditions for each plan**
- **develop clear and consistent policies and processes for administering them**
- **obtain actuarial valuations, using appropriate and consistent assumptions, for the plans**
- **understand the impact of funding options**
- **ensure sufficient funds are available to meet plan obligations**

Background

Income Tax Act defines the pensionable income limits

The *Income Tax Act*[14] limits the amount of income that can be considered pensionable under a registered pension plan. In 1992, the federal government required governments to apply the pensionable income limits defined in the *Income Tax Act* to public service pension plans. Supplementary retirement

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[*] R.S.C. 1985, c.1 (5th supp).

plans (SRPs) were developed and implemented to provide retirement pension for income earned in excess of the limits identified in the *Income Tax Act.*

Eleven different SRPs in the Authorities

The nine regional health authorities, two provincial health boards and Alberta Alcohol and Drug Abuse Commission ("the Authorities") participated in the public service pension plans. In addition to the public service pension plans, there are also 11 different SRPs within the Authorities. These plans were established by previous regional boards between 2001 and 2007.

AHS is now responsible for the SRPs the former Authorities negotiated. Therefore, AHS needs to have a clear understanding of each plan to determine its approach to managing them in the future. AHS will also need this information to assess the plans' impact on executive compensation programs and future financial obligations.

Criteria: the standards we used for our audit
There should be clear and consistent policies for administering SRPs. AHS should have a clear understanding of the inconsistencies within their existing SRPs and impact of any future SRP decisions.

Our audit findings

Terms and conditions of the SRPs are inconsistent

The terms and conditions of the SRPs are identified in the SRP agreements. All but one Authority has a SRP agreement. The terms and conditions for the SRPs are not consistent with one another, except they are all non-contributory. For example:
- Participants—In the majority of plans, the participants are limited to only a few senior executives. However, one Authority has over 40 participants.
- Retirement benefits—Some plans base the pension on 1.75% of the highest average five consecutive years of earnings; other plans base it on 2%. In most plans, retirement benefits are provided monthly for a recipient's lifetime. However, in one plan the monthly retirement benefits are provided for only 10 years.
- Eligible earnings—In some plans, eligible earnings include bonuses; other plans cap bonuses at 20% and in one plan bonuses are not considered eligible earnings.

Purpose of SRP is not clear

The purpose of the SRPs has not been clearly defined. In some instances it appears that they were used to restore pension benefits to what they would have been if the *Income Tax Act* limits did not apply. However, in other plans, it appears that they were used to attract or retain employees. For example, the CEO of the Calgary Health Region who was terminated in July 2008, had 28.6 years of SRP pensionable service, although he had only been with the Authority for 8.8 years. The CEO's contract included these additional

entitlements. Also, several executives in the Authorities were granted additional years of pensionable service.

AHS's unfunded SRP obligation is $20 million

At March 31, 2009, AHS's total obligation for the SRPs was $28 million. Four of the 11 plans are not funded, meaning that there are no designated assets set aside to fund the obligations. The total accrued unfunded obligation at March 31, 2009 for these four plans was $20 million. The total obligation for the plans is, in part, based on the assumptions used, including discount rates and salary increases. The assumptions used to determine each Authority's accrued obligation varied at March 31, 2009. For example, the discount rates ranged from 6.2% to 8.8% and salary increases ranged from 4% to 5%. There were no explanations to support these differences. Given the current economic situation and the unfunded status of a number of the plans, we would expect that a more conservative discount rate of no more than 6.2% would have been used to determine the obligation of the plans. Similar government pension plans use discount rates closer to 5%.

Inconsistent assumptions used

Health provided grant to fund the unfunded SRPs

Alberta Health and Wellness (Health) has provided a grant to AHS to fund its unfunded SRPs. AHS has not made any decisions on how it proposes to fund these plans. AHS will need to assess the funding options and implications and set aside sufficient funding to meet its obligations.

Implications and risks if recommendation not implemented

If AHS management does not understand the terms, conditions and purpose of the SRPs, they will not understand the impact of future decisions. Without consistent plans, policies and procedures, there will be inconsistent SRP benefits and inequitable compensation within AHS.

2.3 Information technology control policies and processes

Recommendation No. 29

We recommend that Alberta Health Services:

- develop an information technology control framework, including appropriate risk management processes and controls, for the management of its information technology resources
- monitor compliance with security policies, implementing effective change management processes and improving passwords controls

Background

IT control framework is essential to mitigate risks

Well-designed and effective information technology (IT) control processes are the best way to preserve the security and integrity of an organization's information and systems. A comprehensive IT control framework should be a critical part of every organization's internal control program to mitigate risks and:

- provide secure services to patients and staff
- protect the confidentiality and security of information
- ensure that systems are available when needed

IT control framework is the foundation for control systems and processes

An IT control framework should drive the IT control processes and specific activities designed to achieve identified control and business objectives, and to mitigate identified risks. Management should monitor and measure the effectiveness of the IT control framework to ensure that IT controls operate as designed and provide efficient and secure services to all patients and staff.

COBIT is a recognized international standard

An IT control framework such as COBIT (Control Objectives for Information and related Technology) is a key element in developing and ensuring that there are proper controls over an organization's information and the systems and processes that create, store, manipulate and retrieve important data. COBIT is an industry-recognized best practice IT control framework developed and maintained by the Information Technology Governance Institute.

We evaluated general computer controls at the Authorities

Our framework for testing computer controls is based on a subset of COBIT. We evaluated the general computer controls at each of the nine regional health authorities, two provincial health boards and Alberta Alcohol and Drug Abuse Commission (the "Authorities"). For each Authority, we evaluated 33 general computer control activities related to its:

- risk management
- application, operating system, network and physical security
- logical access to programs and data
- program change management
- backup and restoration

Criteria: the standards we used for our audit

To properly mitigate significant risks, AHS should use an IT control framework to develop and implement well-designed, efficient and effective IT controls.

Our audit findings

We found a number of weaknesses in the IT controls at each of the Authorities, including ineffective security controls. These weaknesses result from poorly designed control frameworks and the lack of adequate risk assessments.

IT control framework

None of the Authorities used an IT control framework to guide the development of a strong IT control environment. Nor were they able to demonstrate that they had a comprehensive risk management process to identify all potential risks. Specifically, none of the Authorities had:

- an IT control framework to ensure that IT control activities were well-designed to efficiently and effectively mitigate significant risks
- an organizational IT risk assessment strategy to help them identify or mitigate all risks to confidential patient and financial information
- a process to ensure that IT controls were regularly reviewed and consistently followed
- a process to identify risks that could not be efficiently and effectively mitigated by IT controls and to either reduce or accept that risk

Some Authorities performed risk assessments as part of their change management process or the implementation of new IT projects, but these were completed in isolation and only considered the impact of the specific change or project. The Authorities had not performed an IT risk assessment that considered all risks to the IT environment; nor had they related IT risks back to business risks.

IT security controls

We also found a number of common security control weaknesses with monitoring security policies, implementing effective change management procedures and enforcing strong password controls. In Capital Health, Calgary Health Region, Aspen Health Region and AADAC, either the previous auditors or we had made recommendations on IT security controls in prior years. These Authorities were in the process of implementing the outstanding recommendations; therefore, we have not repeated these issues below.

Below is a summary of specific IT weakness we identified:

Authority	Monitoring IT Security Policies	Access Administration for Terminated Employees	Review of Access (i)	Monitoring Security Logs	Review of Network Configuration (i)	Monitoring Physical Access	Change Management Controls	Password Controls
AADAC	PY							
Alberta Cancer Board	✔		✔	✔	✔			
Alberta Mental Health Board	✔	✔						
Aspen Health Region	PY	✔					✔	✔
Calgary Health Region	PY							
Capital Health	PY							
Chinook Health Region	✔		✔	✔	✔		✔	✔
David Thompson Health Region	✔	✔					✔	✔
East Central Health	✔		✔	✔	✔	✔	✔	✔
Northern Lights Health Region	✔	✔	✔	✔	✔		✔	✔
Palliser Health Region	✔	✔	✔	✔	✔	✔	✔	✔
Peace Country Health	✔	✔	✔	✔	✔		✔	✔

(i) - relates to monitoring compliance with security policies

PY - prior year recommendation

✔ - current year weakness

Monitor compliance with security policies

Insufficient IT security monitoring

Most Authorities did not have adequate processes to monitor compliance with their security policies. Specifically we found:

- Six Authorities were not promptly removing user access from the network or an application after the user was terminated. In three Authorities, access was not removed until six months after the termination.
- Five Authorities were not adequately reviewing who had access to financial applications to determine if the access was appropriate or required.
- Six Authorities were not monitoring security logs to detect potential security breaches in their IT environment.
- Six Authorities were not adequately monitoring their network to determine if unauthorized devices were connecting to the network, including wireless devices.
- Three Authorities were not adequately monitoring access to the server room.
- One Authority did not have adequate antivirus processes.

Change management
All seven Rural Regional Health Authorities (RRHAs) used Meditech, an integrated health information system that includes clinical and administration modules. The Regional Shared Health Information Program (RSHIP) was responsible for maintaining the Meditech shared data warehouse and performing specific IT functions.

Responsibility for change management testing is not clear

In discussions with RSHIP and the RRHAs, we found that there was not a clear understanding of the change management testing responsibilities between RSHIP and the RRHAs. The RRHAs assumed that RSHIP was responsible for testing changes and that testing on their part was optional. As well, test plans were not completed or followed by the RRHAs. We tested two Meditech changes and were unable to find documentation evidencing that any of the RRHAs had tested it.

Password controls

Weak password controls exist

While a valid username and password combination is required to access Meditech, and users must change their passwords every 96 days, the following control weaknesses exist:

- there are no restrictions preventing the use of dictionary words as passwords
- Meditech password settings have a minimum length of eight characters, but there is no requirement to use a combination of upper and lower case letters, numbers and non-alphanumeric characters
- error reports identifying failed login attempts are not reviewed

The weak Meditech password controls impacted six Authorities.

Three Authorities also had weak password controls for either their network or other financial applications.

Implications and risks if recommendation not implemented
Without a well-designed process to identify risks to their computing environment, AHS cannot be aware of all risks to their information systems and data. Nor do they have effective IT controls to mitigate the risks.

Inadequate and ineffective IT control processes and activities can lead to:
- confidential patient data being lost, improperly accessed, misused or disclosed
- systems and applications being hacked or abused by malicious users
- implementation of systems or applications that do not work as expected or do not provide the expected benefits

2.4 Budget approval

Recommendation No. 30

We recommend that Alberta Health Services prepare an annual business and financial plan and that this plan be approved by its Board.

Background

Business plans are critical and form an agreement among parties

Business plans are used to communicate an organization's strategies, goals and direction as well as the budgeted resources required to achieve the plan. Business plans are fundamental in ensuring that everyone in the organization understands where the organization is going and the resources they have available to implement the plan. Business plans form an agreement between the stakeholders and management and are used to measure and monitor progress as well as provide accountability mechanisms.

Each Authority was required to prepare a business plan

Authorities prepared business plans on an annual basis. The business plan included the Authority's strategic priorities, measures and targets to assess performance, as well as its financial plan for the year. Each Authority was required to submit its business plan to the Ministry of Health and Wellness.

$9.9 billion in health care expenses

Combined, the Alberta Health Services (AHS) Board was responsible for the oversight of over $9.9 billion in health care expenditures for fiscal 2008–2009.

Criteria: the standards we used for our audit

Business plans should be prepared and approved by the AHS Board and should be communicated to all stakeholders, including the public.

Our audit findings

The Authorities 2008–2009 budgeted operating deficit was $392 million

In 2008–2009, management of each of the Authorities prepared the required business plan and financial plans, but these plans were not approved by anyone other than that Authority's own management. The combined budgeted accumulated deficit reported in the Authorities' business plans was $887 million, with a budgeted operating deficit of $392 million.

Business plans were not approved by the AHS Board or the Minister

Most regional health boards had not approved the Authorities' 2008–2009 business plans before the boards were removed. The AHS Board monitored the quarterly financial results of each of the Authorities in 2008–2009, including the budgets from their financial plans, actual and forecasted financial results; however, none of the Authorities' business plans, including the financial plan, was approved by the AHS Board. A consolidated AHS business plan or budget was not prepared for 2008–2009.

The Authorities' business plans were provided to the Ministry of Health and Wellness. But the Minister of Health and Wellness is not required to approve the business plans and, therefore, did not approve them.

Implications and risks if recommendation not implemented

Without an agreed to business and financial plan, AHS management and its Board may not understand the goals and direction of AHS or the resources they have available to provide health services or achieve their objectives. This situation creates uncertainty and a lack of financial accountability.

2.5 Financial management systems for capital projects
2.5.1 Summary

Assessed capital project financial management systems

Our audit objective was to assess if Alberta Health Services (AHS) has effective and efficient financial management systems to approve, monitor and report on capital projects.

Four Authorities' systems examined

We audited the systems in the following Authorities:

- Calgary Health Region
- Capital Health
- East Central Health
- Peace Country Health

At each Authority, we obtained an understanding of the financial management systems and examined three or four capital projects to test the operating effectiveness of the systems.

Financial management systems are inconsistent and need to be improved

AHS does not have effective and efficient financial management systems to approve, monitor and report on capital projects. Authorities use a variety of capital project management systems. They have policies and processes to review and approve capital project expenses, and to handle cost variances, including change orders. These capital project management systems track key financial information such as project budgets, commitments, actual expenditures and forecasts, but some systems do not track all of this information. Some of these project management systems integrate with their financial systems; others do not.

Two recommendations

We made two recommendations to AHS to improve their capital project financial management systems:

- Obtain approval from the Minister of Health and Wellness for capital projects, secure adequate funding for the capital project before it starts and include the estimated future operating costs in its budget.
- Implement common policies, processes and systems and improve the reporting to the AHS Executive and Audit and Finance Committee.

2.5.2 Capital project funding and approval
Recommendation No. 31
We recommend that Alberta Health Services:

- **obtain appropriate approval from the Minister of Health and Wellness and secure adequate capital funding before starting capital projects that are internally funded or debt financed**
- **ensure budgets include the estimated future operating costs associated with new capital**

Background

Funding options-- three sources

There are three sources of funding for a capital project:
- externally funded (e.g., government, donations)
- internally funded (from AHS's surplus reserves)
- debt funded (debt obtained and paid down through operating surplus reserves)

Authorities prepared a multi-year capital plan

Major health sector capital projects are approved at the provincial level within the context of the government's annual capital budget and provincial priorities. Each year, the regional health authorities (the "Authorities") were required to submit a multi-year capital plan to the Department of Health and Wellness and the Department of Infrastructure. Each Authority's capital plan identified, justified and prioritized major capital projects needed over the next three years and in the longer term. As well, one of the four primary purposes of the multi-year capital plan was to provide a preliminary estimate of the operating cost implications of the proposed capital investments. The Department of Health and Wellness and the Department of Infrastructure used a rating system to determine the government's health capital priorities, which roll up into the provincial health plan. The provincial health plan was then incorporated into the provincial capital plan.

Capital projects require approval from the Minister

The *Regional Health Authority Regulation*[15] states that no Authority shall, without written consent of the Minister, enter into a capital development project that has a value in excess of an amount specified by the Minister in a directive. Although there is no directive that specifies a dollar amount, Authorities have included projects that exceed $2.5 million in their capital plans. As well, the *Hospitalization Benefits Regulation*[16] defines minor capital projects as those with an estimated cost of less than $2.5 million. For projects

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[15] Alta. Reg. 15/95
[16] Alta. Reg. 244/1990

funded through the issue of debentures or otherwise, this *Regulation* also requires Authorities to obtain:

- Treasury Board's approval for projects exceeding $2.5 million
- the Minister of Health and Wellness's approval for:
  - minor construction projects requiring a minor construction grant
  - all construction projects funded through borrowing

Criteria: the standards we used for our audit

AHS should have effective processes to:

- obtain Ministerial approval for major capital projects, prior to starting them
- secure adequate funding before entering into contractual commitments for capital projects

Our audit findings

Weak processes for approving internally funded and debt-financed projects

The Authorities processes for approving internally funded or debt-financed projects need to be improved. While the *Regional Health Authority Regulation* refers to a directive that is supposed to specify the dollar limit for projects that require the Minister's approval, we were unable to find this directive. However, both the capital plan and *Hospitalization Benefits Regulation* refer to capital project limits of $2.5 million.

$277 million in unfunded expenses and commitments

The Authorities incurred total expenditures and contractual commitments of $277 million on the capital projects we examined, but they had not secured adequate funding (external, internal or debt financed) before starting these projects. By 2008, the Authorities had accumulated deficits of $97 million. Authorities in an accumulated deficit position did not have surplus reserves to fund capital projects, either internally or through debt financing. The boards of the Authorities generally approved these projects, but the Minister of Health and Wellness did not.

Examples of unfunded projects

The following are some examples of internally funded projects that were started before financing was obtained:

- Calgary Health Region planned to obtain debt financing to construct two parkades. It incurred costs of $44 million and had contractually committed an additional $124 million as of December 2008 for the two projects, but did not secure debt financing before starting the projects. Nor did Calgary Health Region have accumulated surpluses to fund the parkades with internal funds.
- At March 31, 2008, Capital Health had internally funded budget commitments of $305.5 million, which was $294.3 million in excess of the internally restricted and unrestricted net assets as well as debt financing available. As of January 2009, Capital Health had capital

projects that fit within this category, with total commitments of approximately $81 million. Capital Health did not have sufficient internal reserves in place to fund these projects.

- Peace Country Health had incurred total commitments of $6.4 million for two capital projects, although it did not have secured funding (external, internal or debt financing) in place for any of these projects.

Unbudgeted and unfunded future operating costs is a significant issue

The Authorities' multi-year capital plans did not consider the operating cost implications for all capital projects. Alberta Health and Wellness funded the Authorities through global funding, which was based on population characteristics. Historically, the Authorities spent all of their operating funds delivering services within their existing capital structure. Therefore, the increased operating costs associated with capital projects were not considered in the overall capital project budget. We identified this issue in our 2005–2006 audit of the Department of Health and Wellness's systems for funding Authorities. It remains an issue that is also now more significant given the number of capital projects that AHS is responsible for and its budget challenges.

Implications and risks if recommendation not implemented

If AHS does not secure sufficient funding for capital projects before they start, it may need to re-divert operating funding—intended for health care service delivery—to cover unfunded capital project costs. If approval is not obtained from the Minister of Health and Wellness, the Minister may not be aware of all major capital development projects and the risks associated with them, including future operating costs. As well, from a provincial perspective, the capital project may not be considered a priority, resulting in the completion of lower priority capital projects versus higher priorities. As well, if AHS does not adequately budget for future operating costs associated with capital projects, they may not have sufficient funding to operate the planned facility.

2.5.3 Capital project monitoring systems
Recommendation No. 32

We recommend that Alberta Health Services improve the efficiency and effectiveness of its financial capital project monitoring and reporting systems and processes by:

- implementing common systems, policies and procedures to track and monitor key financial information
- providing relevant, timely and accurate information to Executive Management and the Audit and Finance Committee

Background

Financial information critical

Key financial information such as the approved budget, contractual commitments, change orders, actual and forecasted costs are critical to effectively monitor capital projects and to report their status to Alberta Health Services (AHS) executive management and the Audit and Finance Committee.

Criteria: the standards we used for our audit

AHS should have effective and efficient financial management systems to monitor and report financial information on capital projects promptly. This includes information on project budgets, commitments, secured funding, actual and forecasted expenditures and future operating costs.

Our audit findings

Financial management systems need improvement

The Authorities used a variety of financial capital project monitoring and reporting systems and processes. These systems and processes were inefficient, prone to errors, and did not enable staff to efficiently produce timely, relevant and accurate financial information for AHS executive management and the Audit and Finance Committee.

Information technology systems

Several different systems used

The Authorities used a variety of project management systems to track capital project financial information such as budgets, commitments and actual costs. Thus, it was time-consuming to create a complete report with key financial information of all capital projects in the Authorities.

Examples of inefficiencies and errors

Some financial capital project management systems were inefficient and prone to error. For example:

- Capital Health had a separate capital project management system that tracked budgets, commitments and actual costs, but finance staff had to re-enter invoices in the financial reporting system. Capital Health did not agree the information between the two systems to ensure the information it used to monitor and report on capital projects was complete and accurate.
- Peace Country Health and East Central Health entered the actual costs into their financial reporting systems, and then used complex spreadsheets to extract the information from these systems. However, neither the financial reporting system nor the spreadsheets tracked key financial information such as contractual commitments. East Central Health depended on one employee to ensure complex spreadsheets functioned properly. After the employee left, other staff had difficulty producing the same information.
- East Central Health used a manual project binder to track and monitor actual costs against contractual commitments. This was time consuming and prone to errors.

- In Peace Country Health's capital project spreadsheets, we noted inaccuracies in the data. For example, in one case, the forecasted costs for the project were only $578,000, which were less than the actual costs incurred to date of $611,000.

Access to systems needs to be improved

In addition, Capital Health and Peace Country Health can improve the access controls to their capital project management systems and spreadsheets. They did not have clear policies and processes to ensure only appropriate staff had access to these systems.

Record costs promptly and consistently

Reporting is not complete or accurate

Capital project reports provided to AHS executive management and the Audit and Finance Committee are not complete and are not accurate because significant capital project costs that are incurred, but not yet paid, are not recorded on a timely or consistent basis. Monthly, Calgary Health Region and Capital Health recorded the significant unpaid costs incurred for capital projects. But Calgary Health Region did not have guidance for staff that sets a threshold they can use to determine which unpaid transactions should be recorded—this decision was based on the professional judgment of staff. East Central Health and Peace Country Health only recorded unpaid but incurred costs at year-end. They did not record them monthly or quarterly.

Reporting to AHS executive management and the Audit and Finance Committee

New monthly status report implemented

In January 2009, AHS implemented a standard monthly project status report template for government funded capital projects exceeding $2.5 million. These reports include an update on the project status, milestone dates as well as key financial information such as budget, funding secured, year-to-date expenditures, outstanding commitments, forecasted expenditures and variance explanations. However, this reporting template is not required for projects that are funded through other sources, such as donations, internal reserves or financed through debt.

Reporting to the Committee needs improvement

In November 2008, the AHS executive management presented a report to the Audit and Finance Committee listing all capital projects in progress in the Authorities. The report included the approved budget, funding source and forecasted costs by project. However, AHS's reporting could be improved by:
- providing it to the Audit and Finance Committee at least quarterly
- including totals for key financial information
- including contractual commitments
- identifying the internal funds that are available for internally funded projects

- including estimated future operating costs associated with new infrastructure

Implications and risks if recommendations not implemented
AHS may not be able to effectively approve, monitor and control capital projects, resulting in cost overruns and missed deadlines. Inefficient systems and processes increase costs and the risk of errors.

2.6 Year-end financial reporting processes

Recommendation

We recommend that Alberta Health Services improve its year-end financial reporting processes by:

- **clearly defining roles, responsibilities and decision making authorities for financial reporting**
- **improving processes to identify and resolve key accounting risks and reporting issues on a timely basis**

Background

Financial statements required for each Authority

Although the nine regional health authorities, two provincial boards and AADAC (the "Authorities") were amalgamated into one health authority— Alberta Health Services (AHS)—on April 1, 2009, each Authority was required to produce its own financial statements for the year ended March 31, 2009. On April 1, 2009, all the Authorities amalgamated with East Central Health (ECH), whose name changed to Alberta Health Services.

High turnover of staff in each finance department

In 2008–2009, several staff in the Authorities' finance departments either quit or were terminated. Most of these positions were not replaced and each Authority operated within its remaining staff capacity. The vacant positions were at all levels, including senior management, as well as lower level positions. In addition, a number of the remaining members of senior management, including the CFOs, were assigned positions to assist with the AHS transition.

Criteria: the standards we used for our audit
Responsibility for financial reporting should be clearly defined and communicated and there should be appropriate processes and controls in place to ensure that year-end financial statements are accurate, complete and timely.

Our audit findings

$166 million in errors

The lack of clear roles, responsibilities and direction provided to the Authorities by AHS resulted in inaccurate, incomplete and untimely financial statements as well as an inefficient year-end audit process. Most Authorities had significant errors in their financial statements that had to be corrected. The

Authorities corrected errors totalling $147 million that were identified through our audits. Errors not adjusted by the Authorities totalled $19 million. As a result of the issues arising, the audit of AHS took significantly longer than expected and resulted in substantial additional out-of-pocket costs.

Complete and accurate financial statements not produced within timelines

Due to staff turnover in the finance departments and unique transactions associated with the AHS transition, all of the Authorities struggled with producing complete and accurate financial statements within the predetermined and agreed timelines. In most Authorities, there were significant delays in receiving draft financial statements and supporting documentation to facilitate the year-end audit process. In one Authority, draft financial statements were not completed until two weeks after the deadline. Although most Authorities submitted financial statements to the Department of Health and Wellness at the end of April 2009, some information in the financial statements did not have sufficient supporting documentation to substantiate the amounts at that time. Most Authorities did not have reasonably complete financial statements and supporting documentation available for audit until May 12, 2009—two weeks after the agreed upon deadline.

Competing demands caused inefficiencies and quality suffered

At year-end, as well as during the audit, AHS gave the Authorities' finance departments a number of unrelated tasks with deadlines. The year-end reporting and audit did not appear to be a priority, which created significant inefficiencies. The financial statements and supporting documentation lacked quality.

Lack of responsibility and accountability

There was no clear understanding within the Authorities on who was responsible or accountable for the March 31, 2009 financial reporting. In previous years, each Authority operated independently in determining certain accounting policies, making professional judgments and determining accounting estimates that impacted its year-end financial statements. However, with the transition to AHS, it was not clear what AHS's role was in preparing the Authorities' financial statements, making professional judgments and determining the estimates. Although AHS provided some year-end accounting directions to the Authorities on an ad hoc basis, the Authorities did not always follow the directions.

Unique transactions needed guidance from AHS

There were a significant number of unique transactions resulting from the transition to AHS, and other matters, that required direction from AHS management to ensure transactions were recorded consistently, appropriately and completely within the Authorities financial statements. In a number of instances, AHS either did not provide this direction, provided incorrect direction or did not provide the direction on a timely basis, which resulted in

incomplete and inaccurate financial statements in the Authorities. Examples include:

Guidance on accounting for $80 million grant incorrect

- East Central Health (ECH) received an $80 million grant from the Department of Health and Wellness (Health) for transition expenses. Although the grant was provided to ECH, each of the Authorities had also incurred and recorded transition expenses. AHS provided direction to the Authorities on accounting for these transition expenses and for the grant received from Health through ECH. However, AHS did not consult with Health; the accounting direction they provided was not correct. This resulted in errors totalling $49 million in ECH's financial statements as well as in significant classification errors within each of the Authority's financial statements.

AHS did not understand grant restrictions

- Included in the $80 million transition grant from Health was designated funding for the Authorities' unfunded supplementary retirement plans. When we consulted with AHS, they did not understand the restrictions associated with the funding and how it should be accounted for. After seeking clarification from Health, it was determined that four Authorities had understated their revenues by $21 million.

Unaware of $63 million in funding

- ECH received a $63 million capital grant from Health for capital projects in other Authorities. ECH was not aware of this grant and had not confirmed with the other Authorities if any of these funds were spent prior to the year-end.

$7 million expense not recorded

- Prior to year-end, the AHS President and CEO approved an additional $7 million expense to transfer employees' service from the Public Service Pension Plan to the Local Authorities Pension Plan, for Alberta Cancer Board (ACB) and AADAC employees. AHS was not aware of this decision, although the ACB and AADAC were. The $80 million grant ECH received from Health included designated funds to cover this expense, but neither ACB, AADAC nor ECH recorded this transition expense.

Guidance not provided in a timely manner

- Given the economic downturn, there was an increased likelihood that Authorities had experienced losses in their investment portfolios. The Authorities needed to complete a detailed analysis to determine if the losses should be recognized in their surplus or deficit for the year. AHS provided guidance to the Authorities on this matter, but only two weeks in advance of their year-end.

Discrepancies not followed up

- Although there was a process to confirm transactions between the Authorities, discrepancies were not followed up or resolved. There was no oversight review process by AHS.

Implications and risks if recommendation not implemented

AHS may have inaccurate, incomplete and untimely financial statements and management may make incorrect financial decisions if it relies on this information.

2.7 Expenditure policies and approvals

Recommendation

We recommend that Alberta Health Services improve the efficiency and effectiveness of its expense approval controls by:

- **developing and implementing a clear and comprehensive expenditure approval policy**
- **automating the expenditure controls within the purchasing system**

Background

$9.9 billion in expenses

For fiscal 2008–2009, the Authorities (nine regional health authorities, two provincial health boards and AADAC) incurred expenditures totalling $9.9 billion. Of this, $4.5 billion was processed using the Authorities' purchasing systems, while the remaining $5.4 billion was processed using the Authorities' payroll systems.

Criteria: the standards we used for our audit

Expenses should be appropriately approved in accordance with an expenditure approval policy and the process and controls for verifying authorization should be efficient and effective.

Our audit findings

Expense approval policies need to be improved

The Authorities' expense approval policies were inconsistent; some were not clear and one Authority didn't even have one. For example, in one Authority the expense approval policy defined the authorization limits for non-routine transactions only. Authorization limits for routine transactions were not defined. As well, expense approval controls were not operating effectively in one Authority.

Manual approval verification processes used

In all but one Authority, manual verification processes were used to ensure expenditures were appropriately authorized. Capital Health used automated system controls to verify approval. Given the volume of transactions Alberta Health Services will be processing in the future and the number of employees that will be involved in the processes, it is critical that AHS have a comprehensive, clear, efficient and effective expense approval policy. They should consider automating the approval controls.

Implications and risks if recommendation not implemented

Given the volume of transactions and number of expenditure officers, manually verifying expense authorizations is inefficient and ineffective. If expenses are not appropriately authorized in accordance with a clear and comprehensive expense approval policy, inappropriate expenses and disbursements may occur.

2.8 Approval of drug purchases

Recommendation

We recommend that Alberta Health Services improve controls for drug purchases by ensuring they are properly approved and duties are appropriately segregated.

Background

Inventory technicians process drug purchases

Calgary Health Region's ("the Authority") inventory technicians process drug purchase orders in the Centricity system and place the order. Once the drugs are received, the quantities are also entered into Centricity by the receiving clerks. Inventory technicians receive the invoice and match the invoice to the purchase order and receiving information. The invoice, purchase order and receiving report are then forwarded to the Accounts Payable Department for payment.

The Authority spent approximately $90 million on drugs and gases each year.

Criteria: the standards we used for our audit

Drug purchases should be approved by an expenditure officer before orders are placed.

Our audit findings

Drug purchases were not approved

Although the inventory technicians were instructed not to enter receiving information into Centricity, they had the ability to do so. As well, we tested 15 drug purchases and found that none of them were approved. The inventory technicians who processed the drug purchase orders were not expenditure officers and, therefore, did not have delegated authority to approve the purchase. The invoices were also not approved by any other expenditure officer.

Implications and risks if recommendation not implemented

If drug purchases are not authorized, Alberta Health Services may incur inappropriate purchases and financial losses.

2.9 Physician recruitment incentives

Recommendation

We recommend that Alberta Health Services improve controls for physician recruitment incentives by developing and implementing a policy that identifies:

- **criteria and approvals required for granting loans, income guarantees and relocation allowances**
- **monitoring and collection procedures for physician loans**

Background

Loans, income support and relocation allowances provided to physicians

Palliser Health Region ("the Authority") had entered into recruitment agreements with physicians. These agreements included loans to assist physicians in establishing their practices, income support by way of an income guarantee for a defined period and relocation allowances. The recruitment agreements documented the terms of the loan, the income support specifications and amount of the relocation allowance as applicable.

$791,000 in loans outstanding

The loans, issued in increments of up to $100,000, were to be repaid over a three-year term and were interest-free in the first year. At March 31, 2009, the Authority had recorded a receivable for $791,000 related to 16 physician loans.

Income guarantees ranged from $200,000 to $400,000

Of the 16 recruitment agreements that had loans outstanding, six included income guarantee specifications ranging from $200,000 to $400,000 covering the first two years of the physician's practice. The income guarantee on five of these loans expired in 2008–2009.

Criteria: the standards we used for our audit

Policy and procedures should be established and followed for approving the components of recruitment agreements. Procedures should be implemented for monitoring and collecting physician loans.

Our audit findings

No policies for physician recruitment incentives

The Authority did not have a policy for granting physician recruitment incentives, including the loans. In 2008–2009, the (then) Chief Executive Officer or the Chief Financial Officer for the Authority authorized six loans totalling $400,000. Of the recruitment agreements where loans were issued in the year, one recruitment agreement included an income guarantee specification of $300,000 for the first two years of practice. The Authority also provided relocation allowances aggregating to $139,000.

The Authority did not have documented procedures for collecting and monitoring the loans. Monitoring was performed informally by the Chief Financial Officer and loan interest was not recognized until the final loan payment had been received.

Implications and risks if recommendation not implemented

Without appropriate policies and procedures, controls for physician loans or income guarantees may be inadequate and Alberta Health Services may make inappropriate loans or guarantees, resulting in financial losses.

2.10 Compliance with investment policy

Recommendation

We recommend that Alberta Health Services communicate its investment policy to its asset manager and monitor its investment portfolio on a regular basis to ensure compliance with the investment policy.

Background

David Thompson Health Region ("the Authority") had "Borrowing and Investment Bylaws" that provided minimum and maximum percentages for its investment portfolio as follows:

	Minimum	Maximum
Cash and cash equivalents	20%	100%
Fixed income	0%	60%
Equities	0%	20%

The Authority also had an investments policy statement that provided more specific guidance.

Criteria: the standards we used for our audit

The composition of an Authority's investment portfolio should comply with any related bylaws or investment policies.

Our audit findings

Authority not in
compliance with
investment policy
statement

We compared the composition of the Authority's investment portfolio at March 31, 2009, to the "Borrowing and Investment Bylaws" and the Investments Policy Statement. The investment portfolio appeared to be fully compliant with the "Borrowing and Investment Bylaws." However, within the Investments Policy Statement, the Authority was not in compliance with the following two items:

- Corporate Bonds—investment may be made only in bonds rated A or higher and in total no more than 5% of the Authority's total bond portfolio may be invested in corporate bonds.
- Non-Canadian equities—will be limited to 30% of the total equity portfolio.

Specifically, we noted that at March 31, 2009, the Authority had approximately $4.4 million invested in the TD Private Canadian Corporate Bond Fund. This represented approximately 43% of the Authority's total bond portfolio—well in excess of the 5% allocation to corporate bonds envisioned by the Investment Policy.

At March 31, 2009, the Authority's US equities had a market value of approximately $1.6 million, representing about 38% of the Authority's equity portfolio, exceeding the prescribed 30%.

Implications and risks if recommendation not implemented

If the investment portfolio is not in compliance with the Alberta Health Service's underlying bylaws and policies, the investment portfolio may be subject to more risk than intended by its oversight body.

Financial statements

Unqualified
auditor's opinions

Our auditor's opinions on the Ministry and Department financial statements for the year ended March 31, 2009, are unqualified. The Ministry consolidated the health authorities and health boards using the modified equity method. The modified equity method is allowed as a transition to line-by-line consolidation, which will be required for the year ending March 31, 2010.

We issued unqualified auditor's opinions on the financial statements for the year ended March 31, 2009 of the following entities:

- Alberta Alcohol and Drug Abuse Commission
- Alberta Cancer Board, and Alberta Cancer Foundation
- Alberta Mental Health Board

- Aspen Regional Health Authority
- Calgary Health Region, Calgary Laboratory Services Ltd., and Carewest—its wholly owned subsidiaries
- Capital Health, and Capital Care Group Inc.—its wholly owned subsidiary
- Chinook Regional Health Authority
- David Thompson Health Region
- East Central Health
- Health Quality Council of Alberta
- Northern Lights Health Region
- Palliser Health Region
- Peace Country Health

Performance measures

Unqualified review engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Housing and Urban Affairs
Summary

The Department should improve processes for monitoring direct rent supplement payments—see below

The Department has implemented our recommendation to assess the status of funds advanced to grant recipients for affordable housing—see page 284

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Our audit findings and recommendations

1. Direct rent supplement program payments

   Recommendation

   We recommend that the Department of Housing and Urban Affairs improve its monitoring processes of direct rent supplement payments issued by management bodies, by requiring periodic reviews of these payments.

   Background

Grants are provided to management bodies

The Department of Housing and Urban Affairs administers the direct rent supplement program. The Department provides grants to the management bodies.[1] Management bodies then provide assistance to Albertans who need help paying for their rent. The management bodies are required to maintain the funds in a separate bank account and return any portion of uncommitted funds within 90 days. The grants totalled $40 million for the year ended March 31, 2009.

Department enters into agreements with management bodies to deliver program

The Department has entered into agreements for delivery of this program with 40 management bodies. There are seven major management bodies delivering this program in the following areas: Edmonton, Calgary, Fort McMurray, Grande Prairie, Red Deer, Medicine Hat and Lethbridge. For these management bodies, they approve the applications for the direct rent supplement program. For other management bodies, the Department reviews and approves each application. Each management body receives an administration fee to cover the costs of processing the application and making payments.

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[1] Management bodies are not-for-profit organizations that are established under the *Alberta Housing Act*, R.S.A. 2000, c.A-25. Management bodies administer the Ministry's affordable housing assets. There are over 130 management bodies located throughout Alberta.

Criteria: the standards we used for our audit

Processes should exist to ensure that payments made by management bodies on behalf of the Department are supported and accurate.

Our audit findings

No periodic review

Management bodies that administer the direct rent supplement payments provide monthly detailed reports on who was paid, the payee's address, and how much was paid. The management bodies also provide information on what additional funding is needed to meet expected demand. However, the Department does not periodically review or obtain other assurance that payments are appropriate and supported.

The Department requires audits of the financial statements of the management bodies for the purposes of funding their operating surplus and deficit. However, the direct rent supplement payments are not included in the management bodies' financial statements submitted to the Department. Therefore, these payments are not included in the scope of these financial statement audits.

Implications and risks if recommendation not implemented

Payments made by management bodies may not be supported.

2. Affordable housing—implemented

In our *October 2008 Report* (page 336), we recommended that the Ministry of Housing and Urban Affairs assess the status of funds advanced to grant recipients who have not commenced the construction of affordable housing projects.

Status of funds advanced for affordable housing projects is now being assessed

Management agreed with this recommendation. Steps taken by management to implement this recommendation included:

* assessing the status of advanced funds for projects approved from 2003–2004 to 2007–2008
* quarterly reporting on project status
* revising the payment schedule for new grant agreements
* adding provisions to the grant agreement specifying construction timelines and quarterly reporting

Financial statements

Unqualified
auditor's opinions

Our auditor's opinions on the financial statements of the Ministry, Department and the Alberta Social Housing Corporation for the year ended March 31, 2009 were unqualified.

Performance measures

Unqualified
review
engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Infrastructure

Summary

The Ministry should:

- develop and implement an information technology risk assessment framework—see below
- improve password controls or implement compensating controls to control access to applications—see page 288

Our audit findings and recommendations

1. IT risk management

Recommendation

We recommend that the Ministry of Infrastructure develop and implement an information technology risk management framework.

Background

IT risk management is the analysis, identification, documentation, assessment, and prioritization of risks, followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events. IT risks can originate from many sources, including project failures, accidents, natural causes and disasters, as well as deliberate attacks. Several risk management standards have been developed, including the Project Management Institute, COSO and ISO standards.

Criteria: the standards we used for our audit

The Ministry of Infrastructure should:

- have a comprehensive risk management framework that identifies all information technology risks that it must manage
- implement control processes to economically manage or mitigate identified information technology risks

Our audit findings

The Ministry assesses risks in its IT environment as part of their ongoing operations through activities including business continuity planning (BCP) and project management. By assessing risk on case-by-case situations, like when they are evaluating a new project, the Ministry is only able to obtain a limited view of the risks affecting their environment. The Ministry does not currently have a process to collate all of these risk assessments from the projects, BCP and other sources, to understand IT-related risks (such as changes in technology and threats from new malware), and to be sure that all risks are identified and

mitigated. The Ministry relies on the expertise and knowledge of its senior management to manage IT risks, and ensure that their risk-management strategy is consistently applied. However, no documentation is maintained to evidence this evaluation.

Implications and risks if recommendation not implemented

The Ministry may not be able to proactively monitor their IT risk as technology evolves or as good practices for protecting their environment change. A risk-assessment methodology that addresses the entire environment with regular risk assessments would allow the Ministry to maintain continuity in managing risk if staff leave or change.

2. Password controls

Recommendation

We recommend that the Ministry of Infrastructure improve password controls or implement compensating controls to properly control access to applications.

Background

Password controls are an integral part of data security. They ensure that users cannot make unauthorized changes to systems, applications or the data in them. Passwords are needed to make sure that only people who have been authorized can access the business's critical applications.

Criteria: the standards we used for our audit

The National Institute of Standards and Technology's password standards are considered good practice. We used these standards to assess the application password controls:

- passwords should be at least eight characters long, combining mixed-case letters, numbers and non-alphanumeric characters
- users should be required to periodically change their passwords
- computer accounts should be automatically locked out after a specified number of failed login attempts
- management should periodically monitor and review failed and successful login attempts

Our audit findings

The password settings for the Facilities and Building Information System (FBIS) and the Contract Management System (CMS) did not meet the established good practice criteria. While the applications require a valid username and password combination to access the system, the password does not have to contain a minimum number of characters, and a combination of upper and lowercase letters, numbers and non-alphanumeric characters.

Logging and monitoring of login attempts can reduce risk associated with weak passwords, but we found no evidence that this occurs.

Implications and risks if recommendation not implemented
Without appropriate password and access-monitoring controls in place, unauthorized users may be able to access information.

Financial statements

Unqualified
auditor's opinion

Our auditor's opinion on the Ministry of Infrastructure's financial statements for the year ended March 31, 2009 is unqualified.

Performance measures

Unqualified
review
engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008 2009 Annual Report. We issued an unqualified review engagement report on these measures.

International and Intergovernmental Relations

Past recommendations

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Financial statements

Unqualified auditor's opinion

Our auditor's opinion on the Ministry of International and Intergovernmental Relations' financial statements for the year ended March 31, 2009 is unqualified.

Performance measures

Unqualified review engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Justice and Attorney General
Summary

The Department of Justice should clarify collection steps for judgments assigned to it under the Motor Vehicle Accident program and ensure that external users of the Justice Online Information Systems are following the Department's policies and procedures for granting user access.

The Ministry has implemented the following recommendations:
- our 2006–2007 recommendation to develop and document information technology security policies—see page 296
- our 2006–2007 recommendation to document and test disaster recovery procedures for all information technology systems—see page 296
- to improve access controls over its information systems—see page 296

The Office of the Public Trustee, Estates and Trusts has implemented our recommendation to update administrative policies for client assets—see page 297

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Our audit findings and recommendations

1. Department of Justice
1.1 Motor vehicle accident program—Clarifying collection steps
    Recommendation No. 33
    We recommend that the Department of Justice clarify the collection steps for judgments assigned to it under the Motor Vehicle Accident program.

    Background

Victims can apply to MVAC for payment

The Motor Vehicle Accident Claims (MVAC) branch of the Department can become involved when a driver is in an accident with the driver of an uninsured vehicle or an unknown driver. If a judgment for personal injury is obtained against the uninsured driver, the victim can apply to MVAC for payment.

After 10 years judgment can be renewed

If the application is approved by MVAC, the judgment is assigned to the MVAC administrator who pays the plaintiff on behalf of the debtor. There are payment limits established in the *Motor Vehicle Accident Claims Act.*[1] A

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[1] R.S.A. 2000, c. M-22

judgment remains in effect for 10 years. However, the Ministry can apply to renew the judgment.

Department tracks amounts owing

The amount that has to be paid back to the Department by the debtor is prescribed in the judgment. The Department tracks the amount of debts owing for each debtor.

$159 million in uncollected debts

At March 31, 2009, the Department had $159 million in uncollected debts from uninsured drivers. Of this amount, $67 million or 42% of total outstanding judgments were included in a pending write-off category. This means that these files are no longer included in the active collection efforts taken by the Ministry. There are about $20 million in new judgments that occur each year. About $9 million of the outstanding judgments are classified as pending write-offs each year.

Action can be taken if debtor does not pay

MVAC can take several steps against debtors if payment arrangements are not made. These steps include wage garnishee, bank garnishee, garnishee of federal government refunds, restricting access to motor vehicle registrations, disqualifying a debtor from driving or placing a writ against property.

Four collectors

There are four collectors and a collection supervisor responsible for collecting the amounts owed by the debtors. The collector and the collection supervisor sign a form recommending and approving a file for pending write-off.

Criteria: the standards we used for our audit
There should be clearly defined collection processes for debts owed to the Department.

Our audit findings
Clarifying collection steps required before judgment is classified as pending write-off
The Department does not have clearly defined criteria for what collection steps should be taken before a debtor account is classified as a pending write-off.

Collectors do not consistently take the same collection steps

We examined 20 files that were classified and approved by the collection supervisor as pending write-off. We found that the collectors do not consistently take the same collection steps. For example, in three out of the 20 samples, there were no bankruptcy checks performed. We also noted that in three out of 20 samples, there were no confirmations received from the Department for licence suspension. Also, it was not clear to us what steps must be done before this classification can be made.

Not clear what
collection steps
were taken

The Department does not have clearly defined procedures for file review after a file has been classified as a pending write-off. All 20 files we sampled had been reviewed within the past 12 months. This was evidenced by an electronic note indicating the date of the review. However, there was a lack of documentation indicating what specific collection steps were taken to locate a debtor or assess the status of a file.

Clarifying criteria on renewing a judgment

No criteria

A staff member decides whether or not to renew a judgment. However, there are no established criteria or procedures for whether to renew a judgment that is about to expire. There is no review or approval of this assessment.

Implications and risks if recommendation not implemented

Revenue could be
lost

There is a risk of lost revenue when there are inconsistent collection activities.

1.2 Access controls

Recommendation

We recommend that the Department of Justice obtain assurance that organizations provided access to the Justice On-line Information Network are following the Department's policies and procedures for granting user access.

Background

JOIN tracks
information on
offender status

The Justice On-Line Information Network (JOIN) application is used by all provincial police forces and the courts to track information on offender status. It is also used to record fine payments.

External users
delegated
responsibility to
grant access
privileges to JOIN

The Department has delegated external organizations such as police forces across Alberta with the responsibility to set up JOIN users. The Department enters into a memorandum of understanding with each external organization. It has developed procedures to evaluate organizations that need access to JOIN and only grants access to organizations that have a valid need. One or two staff at each organization are assigned with the responsibility of setting up users, and create user accounts for employees at their organization that need access to JOIN.

Criteria: the standards that we used for our audit

The Department should have documented and effective processes for requesting, establishing, issuing, suspending and promptly closing user account access to all critical business applications.

Our audit findings

Once the organization has been given ability to set up users in JOIN, the Department does not obtain assurance that these organizations are following the Department's policies.

For example, the Department does not have a process to periodically confirm that these organizations are:

- approving all access before it is granted
- ensuring that the access privileges issued are based on business needs
- deleting access to users that no longer require access

Implications and risks if recommendation not implemented

Inappropriately assigned access could result in the unauthorized release of offender information.

1.3 Information technology security—implemented

In our *2006–2007 Annual Report* (No. 31—vol. 2, page 128), we recommended that the Ministry of Justice and Attorney General develop and document information technology security policies. The Ministry now has Ministry-wide security policies and is establishing a training application that provides IT security training for Ministry staff.

1.4 Disaster recovery plan—implemented

In our *2006–2007 Annual Report* (vol. 2—page 129) we recommended that the Ministry of Justice and Attorney General document and test disaster recovery procedures for all information technology systems. The Ministry implemented this recommendation by developing a detailed disaster recovery plan for its critical business applications.

1.5 Information technology access controls—implemented

In our *2006–2007 Annual Report* (vol. 2—page 130) we recommended that the Ministry of Justice and Attorney General improve access controls over its information systems. We consider this recommendation implemented as the Ministry has strengthened its password controls and regularly reviews user access accounts for the majority if its systems that have internal users. As indicated in our access control recommendation on page 295, JOIN has internal and external users and our findings are included in a separate recommendation.

2. Office of the Public Trustee, Estates and Trusts—Administrative policy
    changes—implemented

Policies are updated

In our *2007–2008 Annual Report* (page 331) we recommended the Office of the
Public Trustee, Estates and Trusts update administrative policies for client
assets. These policies have been updated, and therefore, our recommendation
has been implemented.

Financial statements

Unqualified auditor's opinions

Our auditor's opinions on the financial statements for the year ended
March 31, 2009 of the Ministry and the Office of the Public Trustee, Estates and
Trusts are unqualified.

Performance measures

Unqualified review engagement report

The Ministry engaged us to review selected performance measures in the Ministry's
2008–2009 Annual Report. We issued an unqualified review engagement report on
these measures.

Legislative Assembly

Financial statements

Unqualified
auditor's opinions

We issued unqualified auditor's opinions on the financial statements of the following Offices of the Legislative Assembly for the year ended March 31, 2009:

- Legislative Assembly Office
- Office of the Chief Electoral Officer
- Office of the Ethics Commissioner
- Office of the Information and Privacy Commissioner
- Office of the Ombudsman

A private sector firm of chartered accountants appointed by the Standing Committee on Legislative Offices audited our financial statements.

Municipal Affairs

Summary

The Department of Municipal Affairs should:

- set timelines for key steps that must be performed to receive federal government funds to reimburse disaster recovery costs—see below
- use current information on disaster recover costs to periodically assess and, if necessary, adjust estimates of costs and recoveries—see below

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Our audit findings and recommendations

Disaster Recovery Program

Recommendation No. 34

We recommend that the the Department of Municipal Affairs improve its management of the disaster recovery program by:

- **setting timelines for key steps that must be performed before federal government funding can be received**
- **periodically assessing and adjusting costs and recovery estimates based on current information**

Background

Recovering the costs of disasters

Ministry provides natural disaster funding

The Department of Municipal Affairs provides funding for disasters that occur in the Province of Alberta. The funding is provided to individuals, businesses, First Nations, municipalities, and other Government of Alberta ministries. The costs reimbursed to these individuals and organizations, are based on actual eligible costs incurred to repair the damage.

Certain costs recoverable under federal program

A portion of these costs are recoverable from the federal government's Disaster Financial Assistance Arrangements (DFAA) program. The federal government will provide financial assistance when eligible expenditures exceed $1 per capita based on the provincial population. The Province has to apply to the federal government to determine if a disaster is eligible for recovery. This request for financial assistance must be made by the province within six months of the disaster.

Federal government conducts program specific audits

The federal government conducts audits to assess if the costs submitted by the Department are eligible for recovery under federal guidelines. The Department must request this audit in advance. For large disasters, the federal government may conduct an interim audit and then advance funds at the request of the Department. When the project is complete, a final audit is performed and any remaining funds are paid to the Department. The audits are performed at the request of the Department.

Repairs of damages caused by disaster can take several years to complete

It can take years to fully repair damage resulting from a flood or other disaster. Municipal Affairs hires a contractor to estimate the costs, administer these payments and record the costs for each disaster. Under the new DFAA guidelines, for disasters occurring after January 1, 2008, there is a five-year time limit for the completion of repairs.

Estimates included in the financial reporting

Accounts receivable from federal government estimated at $115 million

The Department records the liability to repair the damage after the disaster has occurred and the funding has been approved by the Legislature. The amount recorded is based on an estimate of the reimbursable costs. For the year ended March 31, 2009, the Department has estimated total accounts receivable from the federal government of $115 million for all disaster programs. The majority of these receivables are for the 2004 and 2005 disasters, $10 million and $88 million, respectively.

The accounts receivable is based on total expenses reimbursed less an estimate for ineligible amounts.

In 2008–2009 floods occurred in Alberta. One of the areas that had flood damage was south western Alberta. The costs to repair the damages from this flood are estimated at $9.3 million.

Criteria: the standards we used for our audit

The Department should:
- apply for recoveries prior to the deadline
- ensure estimates reflect the most accurate information available to management

Our audit findings

Target dates—applications

Application for $3.4 million in recoveries not submitted to federal government before application deadline

Although there was dialogue with the federal government, the required formal application was not submitted to the federal government on or prior to the application deadline. On July 30, 2008, the Province of Alberta approved funding to repair the damages caused by the May 2008 flood in southwestern Alberta, through an Order[1] in Council. The Department submitted their formal request for the disaster in December of 2008, five months after the funding was approved. To comply with the deadline, the application should have been submitted to the federal government by the end of November 2008, six months after the disaster occurred. The estimated recovery for this disaster is $3.4 million. The Department has requested the federal government to reconsider its application, and discussions were ongoing when we completed our audit.

Request for audits

Targets dates not established for requesting required audits

The federal government will not advance funding until an interim audit of the program cost is completed. For the 2004 disaster, the Department received an advance from the federal government of $2.5 million in 2005–2006. There is still $10 million in outstanding recoveries on this project. The Department has not yet set targets dates for requesting an audit for either additional interim funding or the final payment.

For the 2005 disaster, the Department has requested and received three interim audits by the federal government. The results of the third interim audit done in February 2009 are not yet finalized. It is not clear what the expected timelines are for completing the project and requesting the final audit.

Estimates

Estimates of costs and recoveries not adjusted for significant fluctuations based on actual cost or new information

The Department does not have a formal process for determining when accrued liabilities to repair the damage or expected recoveries should be adjusted on the financial statements to reflect the expected project outcomes. The estimate of total costs and recoveries is based on initial assessments of the damage after it has occurred. However, the expected costs to complete projects change as actual costs are incurred. For the 2005 disaster, there is a $13 million accrued liability for completion of the project, but estimates prepared by management indicate the costs may be significantly less. Expected recoveries are also less than the original estimate. Management has decided to leave the initial estimate for both the accounts receivable and accrued liability on its financial statements until the project is fully complete. Management should assess if this practice is appropriate for larger disasters which are more difficult to accurately estimate at the time they occur.

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[1] O.C. 360/2008 and O.C. 362/2008 both dated July 30, 2008.

Implications and risks if recommendation not implemented

Available federal funding may not be obtained, or not received, in a timely manner.

Financial statements

Unqualified
auditor's opinions

Our auditor's opinions on the Ministry's and Department's financial statements for the year ended March 31, 2009 are unqualified.

Our auditor's reports for the year ended December 31, 2008, on the following financial statements are unqualified:

- Improvement Districts 4, 9, 12, 13 and 24
- Kananaskis Improvement District
- Special Areas Trust Account

Performance measures

Unqualified
review
engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Seniors and Community Supports

Summary

The Department's Program Branch, working with Community Boards, has:

- implemented our 2003–2004 recommendation to reduce the risk of service providers breaching contracts—see page 306
- implemented our 2003–2004 recommendation to update and improve their contracting policies and procedures—see page 306
- made satisfactory progress in implementing our 2003–2004 recommendation to strengthen the monitoring and evaluation of the performance of service providers—see page 308

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Our audit findings and recommendations

1. Persons with Developmental Disabilities Boards' contracting systems

1.1 Summary

In 2004, we performed an audit of the Persons with Developmental Disabilities (PDD) Provincial Board and Community Boards' systems for contract management. We made three recommendations to the Boards to improve contracting policies and processes for monitoring service providers.

Two recommendations implemented

The Department's PDD Program Branch and Community Boards have implemented significant changes to business and contracting processes that improve both the accountability of service providers and monitoring processes. They have implemented our recommendation to conduct risk assessments and audit service providers. The Boards have also implemented new contracting policies and processes.

Satisfactory progress for monitoring results

The Community Boards have made satisfactory progress in improving their systems for monitoring service providers by examining financial reporting of all service providers and developing standardized processes to evaluate and monitor performance.

To finish implementing our recommendation, the Boards need to work with the Program Branch to develop a common approach to developing service provider audit plans, and consistently apply monitoring activities to new contracts.

2. Findings and recommendations

2.1. Risk assessments—implemented

Background

In our *2003–2004 Annual Report* (No. 8—page 107) we recommended that the Program Branch, in conjunction with the six Community Boards, reduce the risk of service providers breaching contracts by:

- performing a risk assessment to identify service providers with a high risk of breaching contracts; and
- auditing high-risk service providers to ensure that they spend funding according to their contracts and that they meet the other terms of their contracts.

Community Board responsibility to audit service providers

Individual Community Boards are responsible for engaging auditors to audit service providers. The Program Branch also provides staff to assist Boards in completing a limited number of service provider audits each year.

Our audit findings

60 agency audits; recovered $1.3 million

In 2004, Community Boards engaged the Office of the Chief Internal Auditor (later Corporate Internal Audit Services) to perform audits on 60 agencies. These audits were carried out between 2004 and 2006. As a result of the audits, PDD recovered $1.3 million from 16 service providers. An additional $3.4 million is before the courts. Management chose not to pursue collection of $449,000 from five service provider agencies on the grounds that collection was unlikely and it would be uneconomic to pursue collection.

Risk assessments

In 2005, the Community Boards implemented a risk assessment process to identify high risk service providers. The risk assessment examined and scored numerous factors related to agency governance, finances and operations. Since 2006, Community Boards have assessed risks and performed audits as a result of specifically identified issues that arise through monitoring activities or public complaints. Community Boards completed 39 additional audits since 2006, for a total of 99 service provider audits.

2.2. Improving policies and procedures—implemented

Background

In our *2003–2004 Annual Report* (page 109), we recommended that the Program Branch work with the Community Boards to update and improve their contracting policies and procedures.

Our audit findings

New policies
implemented

The Program Branch, working with the Community Boards, has strengthened contracting policies and procedures by implementing:

- a service provider monitoring policy
- a conflict of interest reporting policy
- a contract administration policy
- new contract templates
- changes to service provider compensation processes.

Staff have been trained on the new policies and procedures. We found that Boards' staff applied the new contracting policies.

Contracting policy changes

Service provider
monitoring policy

In 2005, a new service provider monitoring policy was approved. This policy provides guidance to staff in monitoring key areas of service provider performance such as ensuring that service agreements are in place with individuals, Creating Excellence Together certification is in place, and financial reporting requirements are met.

In 2007, the Ministry of Seniors and Community Supports implemented a conflict of interest reporting policy applicable to all entities within the ministry.

Contract
administration
policy

A new Persons with Developmental Disabilities Contracting Administration Policy was put into effect on July 1, 2008. The policy provides guidance on:

- soliciting bids or tenders
- selecting contractors
- preparing business cases for sole-sourcing arrangements
- preparing, executing and approving contracts
- contract management and administrative practices

Contracting changes

Common set of
accountability
standards for
service providers

As at March 31, 2009 Community Boards were in the process of eliminating Individual Funding (IF) arrangements. Individuals receiving services from this service delivery alternative, are transferring to contract funding or family managed support arrangements. All service provider contracts entered into after March 31, 2009 use a common template. Consequently, all service providers are subject to a common set of accountabilities for the use of funds that Community Boards provide.

Payments based
on services
received

Payment mechanisms have also changed. The new contract requires contract service providers to bill monthly for the actual services provided to individuals. This change reduces the risk of service providers accumulating surplus funds.

Staff training and guidance

Training provided

Training sessions were held for Community Board staff in June 2007 and again in October/November 2007. Additional guidance is available on the PDD intranet to assist staff in contracting activities. The Program Branch continues to work with Boards to develop policy and support for staff.

2.3. Monitoring and evaluation of service providers—satisfactory progress

Background

In our *2003–2004 Annual Report* (No. 9—page 111), we recommended that the Program Branch work with the Community Boards to strengthen the monitoring and evaluation of the performance of service providers by:

- requiring individual funding service providers to provide adequate financial reporting
- obtaining annual financial statements to evaluate the financial sustainability of critical service providers
- implementing a sustainable, risk-based internal audit plan
- developing and implementing standard procedures to be followed when Community Board staff are in contact with service providers
- implementing a method to evaluate service provider performance

Our audit findings

Monitoring financial reporting

General purpose financial statements required

Beginning in 2006, all service providers, including those providing services under the IF stream, were required to provide general purpose financial statements. In 2008, the Community Boards began the elimination of the IF service delivery stream. All service provider agencies will be required to enter into a new contract. The new service provider agency contract requires all service providers to submit financial information in prescribed forms and annual financial statements.

Family managed support agreements require families to maintain specific financial information about the services that have been contracted and delivered and to provide Community Boards with annual financial information in a prescribed form.

Boards review financial information

We examined financial information reviews at each of the Community Boards for the 12 months ended March 31, 2008. We noted that service providers were not consistently providing the financial information within the prescribed 120 day time limit. Community Board staff followed up late submissions and completed the financial reviews.

Financial
statement review
results

Community Boards maintained summary information of financial reviews. This information identified contracts where the cost of services provided were less than the amount funded. Community Boards collect these surpluses through receiving a refund cheque or reducing subsequent contract payments. Detailed documentation of the financial statement reviews was not consistently maintained on file. A primary purpose of conducting financial reviews is to identify agencies that may be in financial difficulty; however, we did not see evidence that Community Boards use standard criteria against which the financial position of service providers should be assessed.

To implement the recommendation, the Community Boards need to work with the Program Branch to develop criteria to consistently assess service provider financial health.

Sustainable risk based audit plan

Different
approaches to
developing audit
plans

While the Community Boards have implemented a common enterprise risk management process, we did not see evidence that the Community Boards have consistent plans to deal with ongoing audits of service providers. Some Community Boards arrange audits in response to issues raised from monitoring activities, others advocate introducing an element of randomness when selecting agencies for audit.

To implement the recommendation, the Community Boards need to work with the Program Branch to develop a common approach to developing service provider audit plans.

Service provider performance assessment

The 2005 monitoring policy lays out key areas of service provider monitoring, as well as documentation requirements to demonstrate that monitoring has taken place. Community Boards were performing monitoring in accordance with the policy; however evidence of monitoring activities was not consistently maintained in accordance with the policy.

Contracts contain
performance
requirements

The new contracts contain several requirements that are useful for assessing service provider performance. Service providers must obtain certification under the Creating Excellence Together standards. These standards include quality of life, quality of service, and organizational standards. New contract terms and conditions require that an Individual Service Agreement be in place for each individual receiving service through a service provider agency.

The Boards have not yet had an opportunity to monitor service provider compliance with the new contracts. To implement the recommendation, we will need to examine how the Boards monitor the new contracts.

Financial statements

Our auditor's opinions on the Ministry and Department financial statements for the year ended March 31, 2009 are unqualified.

Our auditor's opinions on the financial statements of the following for the year ended March 31, 2009 are unqualified:

- Persons with Development Disabilities Calgary Region Board
- Persons with Development Disabilities Central Region Board
- Persons with Development Disabilities Edmonton Region Board
- Persons with Development Disabilities Northeast Region Board
- Persons with Development Disabilities Northwest Region Board
- Persons with Development Disabilities South Region Board

Our auditor's opinion on the financial statements of the Calgary Region Community Board has an information paragraph reporting that expenses include payments by the Community Board for services to individuals whose disability did not meet the legal definition of a developmental disability.

Performance measures

The Ministry engaged us to review selected performance measures in the Ministry's 2008-2009 Annual Report. We issued an unqualified review engagement report on these measures.

Service Alberta

Summary

The Ministry of Service Alberta should:

- complete and test an information technology resumption plan—see below
- improve its process to provide timely supporting documentation on payroll information that it maintains for itself and its client ministries—see page 312

The Ministry has:

- made satisfactory progress implementing our 2003–2004 recommendation relating to contracting policies and procedures—see page 313
- implemented our 2005–2006 recommendation to clearly define its performance measures and improve its processes to track and report results—see page 315
- implemented our October 2008 recommendation to securely store confidential information—see page 316
- implemented our 2004 recommendation related to implementing a risk assessment for Central Data Centre assets—see page 317

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Our audit findings and recommendations

1. Information technology resumption plan
   Recommendation No. 35
   We recommend that the Ministry of Service Alberta complete and test an information technology resumption plan.

Background

Service Alberta delivers over 30 enterprise services to different ministries. It uses third party service providers for some of these services. For example, the payroll module in the Government of Alberta's financial system, IMAGIS, is outsourced to one service provider, while the Ministry's core network connection is outsourced to another. Information technology (IT) services that Service Alberta delivers include active directory services, mainframe services, enterprise print services, network and infrastructure services, voice services and support for corporate server environments running on multiple platforms such as Microsoft Windows, UNIX, Solaris and AIX.

Services delivered through two data centres

These services are mainly provided through the Edmonton data centre. Service Alberta has a secondary data centre in Calgary. The Edmonton and Calgary data centres are redundant sites that support each other, and provide a business continuity solution for critical and vital services. Edmonton acts as the recovery site for critical and vital services hosted out of Calgary, and Calgary is the recovery site for Edmonton.

IT resumption plan only partially documented

Service Alberta partially documented an IT resumption plan for its Edmonton Data Centre in 2002; it was last updated in 2006. An IT resumption plan is a set of documents, instructions, and procedures that describe how IT business processes will be restored after a significant disruption has occurred.

Service Alberta should document a complete IT resumption plan

Criteria: the standards we used for our audit
Service Alberta should have a documented IT resumption plan. This plan should include control processes to:

- ensure that all critical services and systems supporting these services are identified in the plan and that the timelines to resume business are agreed to by all affected groups
- regularly test the resumption plan to ensure it is capable of restoring necessary services and systems to within the agreed timelines
- update the resumption plan after testing and communicate changes to all those affected

Service Alberta has not tested it's overall IT resumption plan

Our audit findings
Service Alberta has tested its ability to resume some critical services, including its service desk and some mainframe applications it hosts for client ministries. However, it did not test all mainframe applications, nor did it complete, approve or test its overall IT resumption plan for its computing centre in Edmonton.

Ability to resume critical services unconfirmed

Implications and risks if recommendation is not completed
Service Alberta may not be able to resume critical and vital services, such as remote access, authentication services, network operations and data centre operations within expected timelines.

2. Payroll review processes
Recommendation
We recommend that the Ministry of Service Alberta improve its process to provide timely supporting documentation on payroll information that it maintains for itself and its client ministries.

Background

Service Alberta
processes payroll
for government
departments

Service Alberta's pay and benefit team is responsible for payroll processing for government departments. The team must verify approval of employees' timesheets before processing any payroll payments. As part of the monthly payroll review, the accounting officer uses human resources management system (HRMS) queries to select unusual or large payroll payments for investigation.

Criteria: the standards we used for our audit

Availability of
timely and
complete
documentation is
key to completion
of reviews

Service Alberta should properly maintain and store all documents that support payroll processing. The availability of timely and complete documentation will ensure that Service Alberta's own accounting officer and its client ministries' accounting officers can complete quality payroll reviews.

Our audit findings

Supporting
documents for
reviews not
provided promptly

We examined Service Alberta's payroll review process for two selected months. We noted that the accounting officer did not receive all supporting documents in a timely manner for items selected for review—for November 2008, the payroll team could only promptly provide supporting documents for 11 of 14 payroll items selected, and for only five of 12 payroll items selected for December 2008. As a result, the accounting officer could not complete the necessary reviews of all selected transactions.

We extended our testing to examine Service Alberta's payroll process for a client ministry. In February 2009, we noted that the client ministry's accounting officer could only complete the review from April to September 2008 because the requested supporting documents were not provided promptly by Service Alberta.

Implications and risks if recommendation not implemented

- without adequate review of payroll processing, Service Alberta could make inaccurate or unauthorized payments
- without a proper process to maintain and promptly provide payroll documentation for itself and its client ministries for review, Service Alberta is not meeting its obligations as a service provider

3. **Contracting policies and procedures—satisfactory progress**
   Background
   In our *2003–2004 Annual Report* (No. 20—page 177), we recommended that the Ministry of Service Alberta develop comprehensive contracting policies and procedures, train its staff on how to follow the policies and procedures and monitor staff compliance with them.

In our *2004–2005 Annual Report* (page 282), we reported that the Ministry had put in place new contracting policies and procedures and established a Contract Review Committee (Committee).

Staff compliance with contracting policies and procedures, and a process to deal with exceptions are key

In our *2005–2006 Annual Report* (vol. 2—page 170), we reported that the Ministry continued to make satisfactory progress in improving its contracting systems. We noted that, to finish implementing our recommendation, the Ministry needed to demonstrate staff compliance with all contracting policies and procedures, set a realistic timeline for the Committee to review and comment on contract packages, and establish a process to deal with exceptions.

Our audit findings

The Ministry's contract for services policy outlines contracting procedures that comply with the Agreement on Internal Trade (AIT) and the Trade, Investment and Labour Mobility Agreement (TILMA). The policy requires that:

- all contracts in the amount of $25,000 or more be presented to the Contract Review Committee for approval
- all contracts over $75,000 go through a legal review process
- the Committee must brief the Deputy Minister on all contracts or amendments over $1 million
- urgent contracts may be approved online, in which case the contracts must have approval from at least three Committee members

Contract Management Unit monitors staff compliance

The Ministry's Contract Management Unit (Unit), established in April 2007, is responsible for monitoring contract compliance, reviewing and revising the contract policy. This Unit conducts annual audits on a sample of contracts (45 in 2007–2008, 25 in 2008–2009), communicates its findings on non-compliance to contract managers, and reports its findings to the Contract Review Committee.

Service Alberta needs to deal with non-compliance

Overall, while the Unit is effective in identifying instances of non-compliance, it lacks the mandate needed to reinforce contract managers' compliance with the contracting policy. Nor does the Ministry have a process in place to deal with non-compliance.

Effective formal training to staff is key

The Ministry also updated the contracting policy and put it into practice effective April 1, 2007. We noted that formal training for contract managers was provided in December 2008, when the Ministry offered an expenditure officer refresher course. The course included an explanation of the significance of contract management in the Ministry, methods of sourcing and the role of the Contract Review Committee. The Ministry has over 50 contract managers, of which 26 attended the course. However, when we conducted interviews with a sample of contract managers, we noted that six of nine were either unaware of

the policy that has been in force or of the thresholds for contracts under the ATI and TILMA. Thus, even though the course was offered, its effectiveness is questionable.

To finish implementing our recommendation, the Ministry needs to:
- establish a process to deal with instances of non-compliance
- reinforce staff compliance with contracting policies and procedures by providing effective continuing education

4. Performance measures systems—implemented

Background

Service Alberta should define and report its performance measures

In previous years, we recommended that the Ministry of Service Alberta clearly define its performance measures, and improve its processes to track and report results. In our *2005–2006 Annual Report* (vol. 2—page 164), we reported that the Ministry had made satisfactory progress and that, to finish implementing our recommendation, the Ministry had to develop a performance measure showing its contribution in improving efficiency in the Alberta government and across ministries.

Our audit findings

We reviewed the performance measures in the Ministry's recent business plans and annual reports, and internal operational measures and reporting processes to see if the Ministry has measured and demonstrated its contribution to improving efficiency of cross-ministry services.

Service Alberta measures its shared services delivery

The Ministry's 2008–2011 Business Plan includes *Excellence in Delivering Shared Services to Ministries and Partners* as one of its goals. The Ministry will measure its progress in contributing to government efficiency through technology adoption and integration using two performance measures:
- percentage of invoices paid electronically
- percentage of clients satisfied with services received from Service Alberta

Efficiency achieved is measured

Percentage of invoices paid electronically—measures the efficiencies achieved across ministries by using electronic payment of invoices, a shared service that the Ministry provides. This convenience is expected ultimately to decrease the time ministries spend on administrative tasks.

A new measure on client satisfaction developed

Percentage of clients satisfied with services received from Service Alberta— is a new performance measure that reports the percentage of the Ministry of Service Alberta's client ministries who are satisfied with cross-ministry services such as accounts payable, revenue, pay and benefits, mail and logistics, email, records management, library service, fleet management and web server support. Satisfaction with the timeliness, accuracy and accessibility will

demonstrate efficient execution of the services that have been integrated across the Alberta government. This measure will be reported for the first time in the Ministry of Service Alberta's 2008–2009 annual report. The Ministry is also part of a cross-provincial organization that shares best practices with the federal government and other provincial governments.

To continue improving the tracking and reporting of performance measures, the Ministry uses the Operational Planning System, an online tool, to report performance measures for each goal, in every quarter. The Ministry's Executive Committee and divisional management teams review the reports and use them for planning.

Committee established to evaluate measures

The Ministry has also established an internal Performance Measures Advisory Committee. The Committee periodically evaluates the suitability of existing performance measures and leads the development of new measures.

5. Secured storage for confidential information of Albertans—implemented

Background

Service Alberta processes confidential information

Registry agencies receive requests for cancellation of services previously requested by Albertans. The agencies send the void or cancelled marriage licences and applications for birth, marriage and death certificates, together with the "Request for Cancelling a Service" forms to Service Alberta for processing into the vital statistics (VISTAS) and IMAGIS systems.

Documents archived for seven years, then destroyed

When the Ministry receives the documents and the void or cancelled certificates, it reviews and approves the cancellation requests before entering the cancellation in VISTAS and IMAGIS. The void or cancelled certificates are kept at the Ministry for one year before management sends them for archiving at a government storage site. The documents are kept at the site for seven years and destroyed after this retention period.

In our *October 2008 Report* (page 348), we noted that the void or cancelled certificates are not securely stored at the Ministry's premises. These certificates were kept in a box under the desk of an employee.

Our audit findings

Confidential information now securely stored

The Ministry implemented our recommendation by keeping the void or cancelled documents with confidential information obtained through its vital statistics services in a locked cabinet in a secure location.

6. Risk assessment for Central Data Centre Assets—implemented

Background

Ministry selected framework to manage operational risks

In a management letter in 2004 (reported formally in our *2006–2007 Annual Report*, page 149), we recommended that the Ministry of Service Alberta improve its control framework by implementing a process for conducting formal risk assessments for data centre operations. In 2005, the Ministry acquired an operational risk assessment framework, Microsoft Operations Framework (MOF), to manage risks on a day-to-day basis. In 2006, the Ministry tested a methodology called Fundamental Information Risk Management (FIRM), to perform a threat risk assessment of Active Directory Services. In 2007, the Ministry engaged the MOF framework to manage day-to-day operational risks.

In 2008, Ministry management agreed to expand the scope of its risk assessment framework to identify all risks that could impact services it provides to client ministries.

Our audit findings

Scope of risk management plan updated, critical services identified and high exposure risks regularly reviewed

The Ministry implemented our recommendation by updating the scope of its risk management plan to manage the risks associated with the delivery of its services to client ministries. The Ministry identified critical services it provides to client ministries, and assigned responsibility for these services to specific individuals. Operational subject matter experts perform monthly review of risks, and management review higher risks at monthly meetings.

Financial statements

Unqualified auditor's opinion

Our auditor's opinion on the Ministry financial statements for the year ended March 31, 2009 is unqualified.

Performance measures

Unqualified review engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Solicitor General and Public Security
Summary

The Department of Solicitor General and Public Security implemented our recommendation relating to the Department's business continuity plan (BCP)—see below

Due to changed circumstances our recommendation to the Department to improve its change management processes is no long valid—see below

The Alberta Liquor and Gaming Commission implemented our recommendation relating to change-management—see page 320

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Our audit findings and recommendations

1. The Department of Solicitor General and Public Security
1.1 Department's business continuity plan (BCP)—implemented
   Background
   In our *2006–2007 Annual Report* (vol. 2—page 155), we recommended that the Department of Solicitor General and Public Security develop procedures to implement its business continuity plan (BCP) so it can recover its information technology operations within required timeframes in a disaster.

High reliance on IT

The Department relies heavily on IT and computer based solutions to deliver services.

BCP used to manage risk

A BCP is part of the standard set of tools required by businesses today to manage risk. A BCP involves the processes and procedures put in place to ensure that essential business functions continue to operate during and after a disaster. A key part of a BCP is the disaster recovery plan (DRP). The DRP is the process that guides the organization through key steps required to recover IT applications, within the BCP framework.

Our audit findings

Series of improvements

The Department implemented this recommendation by developing procedures to implement its business continuity plan.

1.2 Change Management—changed circumstances

In our *2006–2007 Annual Report* (vol. 2, page 154), we recommended that the Department of Solicitor General and Public Security improve its change management processes to include changes outsourced service providers make to its information technology environment.

Service Alberta is the main outsourced provider

The Department relies on information technology to make complete and accurate data available for its management systems. The Department and its main service provider, Service Alberta, support and make changes to these systems. The Department is responsible for ensuring that internal and external providers meet expected service levels and that appropriate controls are in place for the security, confidentiality, integrity and availability of their systems and data.

Control evaluated during review of Service Alberta service agreements and IT control framework

In 2008, in response to a recommendation by our Office, Service Alberta began updating service level agreements with all ministries that use the Government of Alberta's shared infrastructure. We are no longer reporting on our recommendation to the Department of Solicitor General and Public Security. Instead, we will examine this control as part of our review of Service Alberta's management of service level agreements, and through follow-up of an additional recommendation to Service Alberta to develop and promote a comprehensive IT control framework for use within government departments.

2. Alberta Gaming and Liquor Commission

2.1 Change-management—implemented

Background

In 2008,[1] we recommended that the Alberta Gaming and Liquor Commission (the Commission) design and implement a comprehensive change-management policy with well-designed, efficient and effective control processes. We further recommended that the Commission ensure that its change-management controls are consistently followed throughout the Commission.

Our audit findings

One change management process

The Commission adopted the change-management process used in the application-development area and created one change-management process for the IT environment. This process now requires documentation to show:

- testing of approved changes
- segregation of duties to approve a change request (initiator and approver must be different people)
- back-out plans
- post-implementation reviews

October 2008 Report of the Auditor General of Alberta, page 351.

We tested the change-management process to determine how changes were requested and implemented in the IT environment. Our scope included changes to critical business applications, as well as to network infrastructure.

New change-management process followed

All changes followed the new change-management process. In addition, the Commission has now trained staff on how to properly document change requests.

Financial statements

Unqualified auditor's opinions

Our auditor's opinions on the financial statements of the Ministry, the Department, the Victims of Crime Fund, the Alberta Gaming and Liquor Commission, and the Alberta Lottery Fund for the year ended March 31, 2009 are unqualified.

Performance measures

Unqualified review engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Sustainable Resource Development

Summary

The Department should improve policies and processes in its information technology control environment—see below

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Our audit findings and recommendations

1.　IT control framework

Recommendation

We recommend the Department of Sustainable Resource Development improve policies and processes in its information technology control environment.

Background

Since 2006, we have made recommendations to the Department to improve various aspects of its information technology general computer controls. These recommendations included:

1.　Update the Department's information technology security policies to meet new Government of Alberta security guidelines. (2007)
2.　Establish and follow procedures to revoke and provide access to its computer systems. (2006)
3.　Improve the environmental and physical controls for Department server rooms. (2007)
4.　Ensure the Department's disaster recovery plan (DRP) meets business requirements and is periodically reviewed. (2007)
5.　Promote and maintain IT security awareness. (2007)

Previous
recommendations
combined into one

In 2009, we reviewed the progress on these five recommendations and have combined them into one recommendation called "IT control framework."

Criteria: the standards we used for our audit

The Department should have documented policies and processes for the IT general computer control environment to help ensure that security and continuity is maintained.

Our audit findings

The Department has not yet updated its information technology security policies to meet new Government of Alberta security guidelines. Senior management of the Information, Communications and Technology Branch has drafted IT policies, but has not approved them as of February 17, 2009.

The Department has not yet established processes to grant and revoke access to its computer systems. Our testing revealed that some users still had access to financial systems after being terminated.

As of February 17, 2009, a relative humidity sensor was not installed in the Department data centre and connected to a protection services alarm system. In addition, the card-access control system was not installed on all the data centre doors, making the card-management and logging features ineffective.

The Department did update both DRP and the Business Continuity Plan (BCP). However, it did not test its DRP or its BCP in the 2008–2009 fiscal year.

In 2007, the Department planned to run three security-awareness programs during the fiscal year. However, the Department is still awaiting approval of the security policies before it can start the security-awareness training. Therefore, the Department did not conduct a security-awareness program in 2008 or 2009.

Implications and risks if recommendation not implemented

Without documented security policies and processes or security awareness training:

- employees may not be aware of their responsibilities for protecting the Department's information assets
- terminated employees could use their credentials to access and make unauthorized changes to financial systems
- the Department risks services outages, and a loss or theft of its data due to poor humidity controls and weak physical security controls

2. Controls over revenue—progress report

Background

In 2008, we recommended that the Ministry review its revenue systems and put processes in place to allow significant revenues currently recorded when cash is received to be recorded when revenue is due to the Crown.

In the accrual basis of accounting, revenues and expenses are reflected in the determination of results for the period in which they are considered to have been earned and incurred, respectively, whether or not such transactions have been settled finally by the receipt or payment of cash or its equivalent.

In the cash basis of accounting, revenue is recorded when cash is received

The Ministry records surface disturbance charges for mineral surface leases as well as sand and gravel royalties on a cash basis.

Criteria: the standards we used for our audit
Controls over revenue should ensure revenue is completely and accurately recorded.

Management actions

Ministry is now invoicing outstanding fees

In March 2009, the Ministry hired consultants to review its files related to land disturbance fees. Based on the work performed by the consultants, the Ministry estimated that approximately $9.5 million of land disturbance fees from prior years were not assessed and invoiced. They also estimated $2.9 million of land disturbance fees would be assessable for 2008. In April 2009, the Ministry began invoicing industry for these amounts. The Ministry is still developing processes and assessing resource needs so that revenues can be assessed and accrued in a timely manner.

Full implementation planned by March 2010.

The Ministry plans to fully implement this recommendation and adopt an accrual basis of accounting in the 2009–2010 fiscal year.

What remains to be done
In order to fully implement this recommendation, the Ministry needs to:
- Implement ongoing processes to ensure revenues related to land disturbance fees and sand and gravel royalties can be estimated for accounting purposes and invoiced for timely collection,
- Ensure adequate supporting documentation is available to support all amounts invoiced pertaining to prior years fees,
- Be able to assess the collectability of these prior year revenue amounts before accruing them.

Implications and risks if recommendation not implemented
The Ministry may not bill and correctly record all the revenue it is entitled to. The Ministry may also not be able to fully collect the revenue earned in the year because the limitation period for enforcement as per the *Limitations Act*[1] may have expired.

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[1] R.S.A. 2000 c.L-12

Financial statements

Unqualified auditor's opinions

Our auditor's opinions on the financial statements of the Ministry, the Department and the Environmental Protection and Enhancement Fund for the year ended March 31, 2009 are unqualified.

Our auditor's opinions on the financial statements of the Natural Resources Conservation Board for the year ended March 31, 2009 is unqualified.

Performance measures

Unqualified review engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Tourism, Parks and Recreation

Past
recommendations

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Financial statements

Unqualified
auditor's opinions

Our auditor's opinions on the financial statements of the Ministry, Department and the Alberta Sport, Recreation, Parks and Wildlife Foundation for the year ended March 31, 2009 are unqualified.

Performance measures

Unqualified
review
engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Transportation

Summary

The Department of Transportation should develop and implement an Information Technology risk assessment framework — see below

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Our audit findings and recommendations

IT risk assessment

Recommendation

We recommend that the Department of Transportation develop and implement an Information Technology risk assessment framework.

Background

IT risk management is the analysis, identification, documentation, assessment, and prioritization of risks, followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events. IT risks can originate from many sources, including project failures, accidents, natural causes and disasters, as well as deliberate attacks. Several risk management standards have been developed, including the Project Management Institute, COSO, and ISO standards.

Criteria: the standards we used for our audit

The Department of Transportation should:

- have a comprehensive risk management framework that identifies all information technology risks that it must manage
- implement control processes to economically manage or mitigate identified information technology risks

Our audit findings

The Department assesses risks in its IT environment as part of their ongoing operations through activities including business continuity planning (BCP) and project management. By assessing risk on case by case situations, like when they are evaluating a new project, the Department is only able to obtain a limited view of the risks affecting their environment. The Department does not currently have a process to collate all of these risk assessments from the projects, BCP and other sources, to understand IT-related risks (such as changes in technology and threats from new malware), and to be sure that all risks are identified and mitigated. The

Department relies on the expertise and knowledge of its senior management to manage IT risks, and ensure that their risk-management strategy is consistently applied. However, no documentation is maintained to evidence this evaluation.

Implications and risks if recommendation not implemented

The Department may not be able to proactively monitor their IT risk as technology evolves or as good practices for protecting their environment change. A risk-assessment methodology that addresses the entire environment with regular risk assessments would allow the Department to maintain continuity in managing risk if staff leave or change.

Financial statements

Unqualified
auditor's opinion

Our auditor's opinion on the Ministry of Transportation for the year ended March 31, 2009 is unqualified.

Performance measures

Unqualified
review
engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

Treasury Board

Past recommendations

For any outstanding recommendations previously made to the organizations that form the Ministry, please see our outstanding recommendations list on page 335.

Financial statements

Unqualified auditor's opinion

Our auditor's opinion on the Ministry of Treasury Board's financial statements for the year ended March 31, 2009 is unqualified.

Performance measures

Unqualified review engagement report

The Ministry engaged us to review selected performance measures in the Ministry's 2008–2009 Annual Report. We issued an unqualified review engagement report on these measures.

AUDITOR
GENERAL
Alberta

Past Recommendations

Report of the Auditor General of Alberta—October 2010

Outstanding Recommendations

This is a complete list of numbered and unnumbered recommendations that are not yet implemented. Recommendations older than three years or that have been repeated one or more times are identified accordingly. Audits marked with an asterisk * indicate that management believes the recommendation has been implemented but we have not yet conducted a follow-up audit. Reports containing these recommendations are on our website at www.oag.ab.ca.

We currently have 257 outstanding recommendations—124 are numbered, 133 are unnumbered, 11 are repeated and 27 are more than three years old. We use three years as a performance measure for when we expect management to implement our numbered recommendations.

Advanced Education and Technology

Department

*
- Non-credit programs: Standards and expectations—April 2008, #1, p. 22
- Non-credit programs: Monitoring—April 2008, #2, p. 23
- Monitoring vocational programs offered by private institutions—April 2008, p. 42
- IT control policies and processes—April 2008, #8, p. 195

Alberta College of Art and Design

- IT internal controls—2006–07, vol. 2, p. 21
- Financial reporting and year-end processes—April 2008, p. 180
- Preserving endowment assets—April 2009, p. 78

Bow Valley College

*
- Contract reviews—April 2009, p. 16
*
- Contracting processes—April 2009, p. 18
*
- Vendor maintenance—April 2009, p. 19
*
- Processing of contract payments—April 2009, p. 20
*
- Unethical conduct in the workplace—April 2009, p. 21
*
- Quarterly financial reporting—April 2009, p. 94

Grande Prairie Regional College

*
- Capital asset management—April 2008, p. 184
- Preserving endowment assets—April 2009, p. 78

Grant MacEwan University[1]

- Computer control environment—2004–05, p. 104
  (outstanding 3 or more years)
*
- Construction management—November 2006, #9, p. 35
- Donations—November 2006, #10, p. 37
*
- Bookstore operations—April 2008, p. 186
*
- Parking services fees—April 2009, p. 82
*
- Sports and Wellness Centre—April 2009, p. 83
*
- Prompt completion of sub-ledger reconciliations—April 2009, p. 84
*
- Capital assets—April 2009, p. 85

Keyano College

- Preserving endowment assets—April 2009, p. 78

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[1] By Order in Council (O.C. 481 2009 dated September 24, 2009) Grant MacEwan College's name was changed to Grant MacEwan University.

Lakeland College
- Preserving endowment assets—April 2009, p. 78
- Improve payroll controls—April 2009, p. 91
- Segregation of duties over journal entries—April 2009, p. 92

Lethbridge College
- Preserving endowment assets—April 2009, p. 78

Medicine Hat College
- Preserving endowment assets—April 2009, p. 78
- Periodic reporting to the Board—April 2009, p. 95

Mount Royal University[2]:
- Retention and severance agreements—2004–2005, p. 100
- Governance and Human Resources Committee Charter—2004–2005, p. 101
- Preserving endowment assets—April 2009, p. 78
- Segregation of payroll duties—April 2009, p. 93

NorQuest College
- Preserving endowment assets—April 2009, p. 78
- Internal controls over cash—April 2009, p. 87
- Procurement cards—discrepancy log—April 2009, p. 88
- Procurement cards-compliance with policy—April 2009, p. 89

Northern Alberta Institute of Technology
- Construction management: selection processes—April 2008, p. 48
- Review of procurement card transactions—April 2009, p. 90

Olds College
- Preserving endowment assets—April 2009, p. 78

Portage College
- Preserving endowment assets—April 2009, p. 78

Red Deer College
- Preserving endowment assets—April 2009, p. 78

University of Alberta
- Strategic planning for Research—2003–04, p. 252
  (outstanding 3 or more years)
- Security configuration settings—2006–07, vol. 2, p. 24

University of Calgary
- Research measures and targets—2003–04, p. 254
  (outstanding 3 or more years)
- Planning for research capacity—2003–04, #26, p. 255
  (outstanding 3 or more years)
- Research roles and responsibilities—2004–05, #18, p. 90
  (outstanding 3 or more years)
- Research policies—2004–05, p. 91
  (outstanding 3 or more years)
- Research project proposals—2004–05, p. 92
  (outstanding 3 or more years)
- Research project management—2004–05, p. 93
  (outstanding 3 or more years)
- Research revenues and expenditures—2004–05, p. 94
  (outstanding 3 or more years)
- General computer controls—2005–06, vol. 2, p. 20
- IT governance and control framework—2006–07, #18, vol. 2, p. 10

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[2] By Order in Council (O.C. 435/2009 dated September 2, 2009) Mount Royal College's name was changed to Mount Royal University.

- Controls—research and trust accounts—2006–07, vol. 2, p. 15
  (repeated once since 2003–04) (outstanding 3 or more years)
- Improving the control environment—October 2008, #21, p. 213
- PeopleSoft security—October 2009, #11, p. 155
  (repeated three times since 2005–06)
- Controls over payroll—October 2009, p. 153
  (repeated twice since 2006–07)
- Improving controls over journal entries—October 2009, p. 157
  (repeated once since October 2008)

University of Lethbridge
- IT internal control framework—2006–07, #21, vol. 2, p. 23
* - Financial research roles and responsibilities—October 2008, p. 225
* - Clear and complete research policies—October 2008, p. 227
* - Processes for investing in research projects—April 2009, #1, p. 26

Agriculture and Rural Development

Department
* - Performance measurement—2002–03, #3, p. 49
  (outstanding 3 or more years)
- Evaluating program success: grant management—2004–05, #20, p. 113
  (repeated once since 2000–01) (outstanding 3 or more years)
- Food Safety: Alberta Agriculture's surveillance program—2005–06, #9, vol. 1, p. 88
- Food Safety: Alberta Agriculture's food safety information systems—2005–06, vol. 1, p. 94
- Verifying eligibility for Farm Fuel Benefit program—2005–06, #24, vol. 2, p. 37
- Monitoring IT security policy—2005–06, vol. 2, p. 40
- Reporting and dealing with allegations of employee misconduct—November 2006, #12, p. 46

Department and Health and Wellness
- Food Safety: Integrated food safety planning and activities—October 2009, #11 , p. 107
  (repeated once since 2005–06)
- Food Safety: Accountability—October 2009, #13, p. 114
  (repeated once since 2005–06)
- Food Safety: Eliminating gaps in food safety inspection coverage—October 2009, #12, p. 111
  (repeated once since 2005–06)

Agriculture Financial Services Corporation
- Loan loss processes—2006–07, vol. 2, p. 32

Children and Youth Services

Department
* - Risk assessment and internal audit services—2001–02, #9, p. 54
  (outstanding 3 or more years)
* - Enhanced child intervention standards—2006–07, #6, vol. 1, p. 79
* - Accreditation systems for service providers—2006–07, #7, vol. 1, p. 82
* - Department compliance monitoring—2006–07, #8, vol. 1, p. 83

Child and Family Services Authorities
* - Authorities compliance monitoring processes—2006–07, vol. 1, p. 86
* - Authorities monitoring of service providers—2006–07, vol. , p. 88

Culture and Community Spirit and Tourism, Parks and Recreation

- Computer control environment—2006–07, vol. 2, p. 172

Education

- School board budget process—2005–06, #25, vol. 2, p. 65
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Reference

Report of the Auditor General of Alberta—October 2008

Glossary

This glossary explains key accounting terms and concepts in this report.

Accountability
Responsibility for the consequences of actions. In this report, *accountability* requires ministries, departments and other entities to:
- report their results (what they spent and what they achieved) and compare them to their goals
- explain any differences between their goals and results

Government accountability allows Albertans to decide whether the government is doing a good job. They can compare the costs and benefits of government action: what it spends, what it tries to do (goals), and what it actually does (results).

Accrual basis of accounting
A way of recording financial transactions that puts revenues and expenses in the period when they are earned and incurred.

Adverse auditor's opinion
An auditor's opinion that financial statements are not presented fairly and are not reliable.

Assurance
An auditor's written conclusion about something audited. Absolute assurance is impossible because of several factors, including the nature of judgment and testing, the inherent limitations of control, and the fact that much of the evidence available to an auditor is only persuasive, not conclusive.

Attest work, attest audit
Work an auditor does to express an opinion on the reliability of financial statements.

Audit
An auditor's examination and verification of evidence to determine the reliability of financial information, to evaluate compliance with laws, or to report on the adequacy of management systems, controls and practices.

Auditor
A person who examines systems and financial information.

Auditor's opinion
An auditor's written opinion on whether things audited meet the criteria that apply to them.

Auditor's report
An auditor's written communication on the results of an audit.

Business cases
An assessment of a project's financial, social and economic impacts. A business case is a proposal that analyses the costs, benefits and risks associated with the proposed investment, including reasonable alternatives. The province has issued business case usage guidelines and a business case template that the Department can refer to in establishing its business case policy.

Capital asset
A long-term asset.

COBIT
Abbreviation for "Control Objectives for Information and Related Technology." COBIT was developed by the Information Systems Audit and Control Foundation and the IT Governance Institute. COBIT provides good practices for managing IT processes to meet the needs of enterprise management. It bridges the gaps between business risks, technical issues, control needs, and performance measurement requirements.

Criteria
Reasonable and attainable standards of performance that auditors use to assess systems.

Cross-ministry
The section of this report covering systems and problems that affect several ministries or the whole government.

Crown
The Government of Alberta.

Deferred maintenance	Any maintenance work not performed when it should be. Maintenance work should be performed when necessary to ensure capital assets provide acceptable service over their expected lives.
ERP	Abbreviation for Enterprise Resource Planning. ERPs integrate and automate all data and processes of an organization into one comprehensive system. A typical ERP has multiple modules within a computer software application, standardized hardware, and a centralized database used by all modules to achieve this integration. Although an ERP can be as small as an accounting and payroll application, the term ERP is usually associated with larger systems that perform many functions within an organization. Examples of modules in an ERP, which formerly would have been stand-alone applications, include: Financials (General Ledger, Accounts Payable, and Accounts Receivable), Payroll, Human Resources, Purchasing and Supply Chain, Project Management, Asset Management, Student Administration Systems and Decision Support Systems. Some of the more common ERPs are PeopleSoft, SAP, Great Plains, and Oracle Applications.
Exception	Something that does not meet the criteria it should meet—see "Auditor's opinion."
Expense	The cost of a thing over a specific time.
GAAP	Abbreviation for "generally accepted accounting principles," which are established by the Canadian Institute of Chartered Accountants.
Governance	A process and structure that brings together capable people and relevant information to achieve goals. Governance defines an organization's accountability systems and ensures the effective use of public resources.
IMAGIS	Abbreviation for the government's Integrated Management Information System—a customized version of *PeopleSoft*. It is the main computer program that ministries use for financial and human resource information systems.
Internal audit	A group of auditors within a ministry (or an organization) that assesses and reports on the adequacy of the ministry's internal controls. The group reports its findings directly to the deputy minister. Internal auditors need an unrestricted scope to examine business strategies; internal control systems; compliance with policies, procedures, and legislation; economical and efficient use of resources; and the effectiveness of operations.
Internal control	A system designed to provide reasonable assurance that an organization will achieve its goals. Management is responsible for an effective internal control system in an organization, and the organization's governing body should ensure that the control system operates as intended. A control system is effective when the governing body and management have reasonable assurance that: • they understand the effectiveness and efficiency of operations • internal and external reporting is reliable • the organization is complying with laws, regulations, and internal policies
Management letter	Our letter to the management of an entity that we have audited. In the letter, we explain: 1. our work 2. our findings 3. our recommendation of what the entity should improve and how it should do so 4. the risks if the entity does not implement the recommendation We also ask the entity to explain specifically how and when it will implement the recommendation.
Material, materiality	Something important to decision-makers.
Misstatement	A misrepresentation of financial information due to mistake, fraud, or other irregularities.

Outcomes	The results an organization tries to achieve based on its goals.
Outputs	The goods and services an organization actually delivers to achieve outcomes. They show "how much" or "how many."
Performance measure	Indicator of progress in achieving a goal.
Performance reporting	Reporting on financial and non-financial performance compared to plans.
Performance target	The expected result for a performance measure.
Qualified auditor's opinion	An auditor's opinion that things audited meet the criteria that apply to them, except for one or more specific areas—which cause the qualification.
Recommendation	A solution we—the Office of the Auditor General of Alberta—propose to improve the use of public resources or to improve performance reporting to Albertans.
Review	Reviews are different from audits in that the scope of a review is less than that of an audit and therefore the level of assurance is lower. A review consists primarily of enquiry, analytical procedures and discussion related to information supplied to the reviewer with the objective of assessing whether the information being reported on is plausible in relation to the criteria.
Risk	Anything that impairs an organization's ability to achieve its goals.
Risk management	Identifying and then minimizing or eliminating risk and its effects.
Securitization	Is a financial transaction, which involves the pooling and repackaging of cash-flow producing financial assets into securities that are then sold to investors.
Sole source contract	An agreement with just one supplier chosen without a competitive bidding process.
Specified auditing procedures	Actions an auditor performs to check certain qualities, such as reliability, of reported information that management asks the auditor to check. Specified auditing procedures are not extensive enough to allow the auditor to express an opinion on the information.
Systems (management)	A set of interrelated management control processes designed to achieve goals economically and efficiently.
Systems (accounting)	A set of interrelated accounting control processes for revenue, spending, the preservation or use of assets, and the determination of liabilities.
Systems audit	To help improve the use of public resources, we audit and recommend improvements to systems designed to ensure value for money. Paragraphs (d) and (e) of subsection 19(2) of the *Auditor General Act* require us to report every case in which we observe that:

- an accounting system or management control system, including those designed to ensure economy and efficiency, was not in existence, or was inadequate or not complied with, or
- appropriate and reasonable procedures to measure and report on the effectiveness of programs were not established or complied with.

To meet this requirement, we do *systems audits*. First, we develop criteria (the standards) that a system or procedure should meet. We always discuss our proposed criteria with management and try to gain their agreement to them. Then we do our work to gather audit evidence.

Next, we match our evidence to the criteria. If the audit evidence matches all the criteria, we conclude the system or procedure is operating properly. But if the evidence doesn't match all the criteria, we have an audit finding that leads us to recommend what the ministry must do to ensure that the system or procedure will meet all the criteria.

For example, if we have 5 criteria and a system meets 3 of them, the 2 unmet criteria lead to the recommendation.

A *systems audit* should not be confused with assessing systems with a view to relying on them in an audit of financial statements.

Unqualified auditor's opinion
An auditor's opinion that information audited meet the criteria that apply to them.

Unqualified review engagement report
Although sufficient audit evidence has not been obtained to enable us to express an auditor's opinion, nothing has come to our attention that causes us to believe that the information being reported on is not, in all material respects, in accordance with appropriate criteria.

Value for money
The concept underlying a systems audit is *value for money*. It is the "bottom line" for the public sector, analogous to profit in the private sector. The greater the value added by a government program, the more effective it is. The fewer resources that are used to create that value, the more economical or efficient the program is. "Value" in this context means the impact that the program is intended to achieve or promote on conditions such as public health, highway safety, crime, or farm incomes. To help improve the use of public resources, we audit and recommend improvements to systems designed to ensure value for money.

Other resources

The Canadian Institute of Chartered Accountants (CICA) produces a useful book called, *Terminology for Accountants*. They can be contacted at CICA, 277 Wellington Street West, Toronto, Ontario, Canada M5V 3H2 or www.cica.ca.

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**AUDITOR
GENERAL**
Alberta

Office of the Auditor General of Alberta
8th Floor, 9925 – 109 Street NW
Edmonton, Alberta, Canada T5K 2J8
Phone: 780-427-4222
Fax: 780-422-9555
Email: info@oag.ab.ca

This report is available online at www.oag.ab.ca.